SEQUENCE LISTING

<110> Fridakis, Tony N.
 Smith, John M.
 Reed Steven G.
 Misher, Lynda
 Retter Marc W.
 Dillon, Davin C.

<120> COMPOSITIONS AND METHODS FOR THE TREATMENT AND DIAGNOSIS OF BREAST CANCER

<130> 210121.419C7

<140> US

<141> 2000-03-23

<160> 317

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<212> DNA

<213> Homo sapien

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Sulph

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 Arg Lys Leu Gln Lys Leu Glu Gly Phe Cys Trp Asn Glu Tyr Gln Ser
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 Ala Phe Arg Asp Sex Leu Lys Gly Phe
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tetteaaage etaacagate aageagetet edagtgeaca acetgegeee aggtaaatge
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caaaaaaggt cctaaaccca gcccaggcca ccgtctccaa gaaaactcac caggagaaaa
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actggtagac accttctctg gatggactga agcat/ttgct accaaaaacg aaactgtcaa
                                                                    360
tatggtagtt aagtttttac tcaatgaaat catcc\phitcga cgtgggctgc ctgttgccat
                                                                    420
 agggtetgat aatggaaegg eettegeett gtetatagt taateagtea gtaaggegtt
                                                                    480
aaacattcaa tgyaagetee attgtgeeta tegaeeeaga getetgggea agtagaaege
                                                                    540
atgaactgca ccctaaaaaa acactettac aaaattaatc ttaaaaaccg gtgttaattg
                                                                    600
egttagtete ettecettag eectaettag agttaaggta cacceettae tgggetgggt
                                                                    660
 cctttacctt ttgaaatcat ntttnggaag gggctgccta \tctttnctta actaaaaaan
                                                                    720
gcccatttgg caaaaatttc ncaactaatt tntacgtncc dacgtctccc caacaggtan
                                                                    780
aaaatetne tgeeetttte aaggaaceat eecateeatt edtnaacaaa aggeetgeen
                                                                    840
ttetteecee agttaaetnt tttttnttaa aatteecaaa aaangaaeen eetgetggaa
                                                                    900
daacneeece etecaaneee eggeenaagn ggaaggttee ettgaateee neeecenena
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1080
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                                                                   120
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tttccatcat tttaaggggt taaaatcatc ttgttcagac ctcagcatat aaaatgaccc
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                                                                        240
 gccaggtttc agctqcagat atccctggaa ggaatattcc agattccctg agtagtttcc
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                                                                        360
 gattttggat ttttaakttt aatgettgtg aaacgetata aaaaaaattt tetacceeta
                                                                        420
 gctttaaagt actgttagtg agaaattaaa attccttcag gaggattaaa ctgccatttc
                                                                        480
 agttacccta attccaaatg ttttggtggt tagaatcttc tttaatgttc ttgaagaagt
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 gttttatatt ttcccatcna gataaattct ctcncncctt nnttttntnt ctnnttttt
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                                                                        660
 cttgcaanaa tnctgcntcc caaaattacc ncctttttcc cacctccacc ccnnggaatt
                                                                        720
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                                                                        780
 acgggtttcc tgttttagtt aggatggccc anntctgacc contnatent coccetenge
                                                                        840
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                                                                        900
 tntggantct tgaatnncgg gtttkccctt ttaaaccnat ttttttttn nnncccccan
                                                                        960
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                                                                       120
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                                                                       180
aggatcactg gctctaatca ccatgacatg aggtcaccac \cup{c}aaaccatca agcgctaaac
                                                                       240
agacagaatg tttccactcc tgatccactg tgtgggaaga agcaccgaac ttacccactg
                                                                       300
gggggcctgc ntcanaanaa aagcccatgc ccccgggtnt n\phictttnaac cggaacgaat
                                                                       360
naacccacca tecceacane teetetgtte ntgggeeetg catettgtgg cetentnine
                                                                       420
tttnggggan acntggggaa ggtaccccat ttcnttgacc ccnknanaaa accccngtgg
                                                                       480
ccctttgccc tgattcncnt gggccttttc tcttttccct tttgggttgt ttaaattccc
                                                                       540
aatgteecen gaaccetete entnetgeee aaaacetace taaattnete netangnntt
                                                                       600
ttettggtgt tnetttteaa aggtnaeett neetgttean neeenaenaa aatttnttee
                                                                       660
ntatnntggn cccnnaaaaa nnnatcnncc cnaattgccc gaattg
                                                                       720
nctgggggaa accetttaaa tttccccctt ggccggcccc cctttttdcc cccctttnga
                                                                       780
aggcaggngg ttcttcccga acttccaatt ncaacagccn tgcccattqn tgaaaccctt
                                                                       840
ttcctaaaat taaaaaatan ccggttnngg nnggcctctt tcccctccn g gngggnngng
                                                                       900
aaanteetta eecenaaaaa ggttgettag eeceengtee eeacteeece nggaaaaatn
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                                                                         120
 ctgggattac aggcgtgcaa caccacaccc ggctaatttt gtatttttaa tagagatggg
                                                                         180
 gttttccctt gttggccann atggtctcna acccctgacc tcnngtgatc cccccncccn
                                                                         240
 nganctenna etgetgggga tnæcegnnnn nnneeteeen nenennnnn nenennteen
                                                                         300
 tnntccttnc tennnnnnn enntcnntee nnettetene ennntnttnt ennenneenn
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 ennneenent neeenennnt tenentnenn thteennenn nntennennn ennnnentnn
                                                                         420
 conntacnte ntnnnennnt contetntnn cotonnennt enctnenent tntctccten
                                                                         480
 ntnnnnnnet cennnnntet entenennen tneetenntn neeneneee neetenenne
                                                                         5.40
 ctnntttnnn cnncnnntcc ntnccnttcn nntccnntnn cnncntcncn nncnttnttc
                                                                         600
 concenntte ettnementn nnntntennn enentennte ntttneteet nnntecenne
                                                                         660
 tennttence ennnteence eccencetnt etetenceen nntnnntntn nnnenteenc
                                                                         720
 tntenentte ntenntnent tnetntenne \nnenntnene tncentntnt etnnntenen
                                                                         780
 tenentnten centeenttn etnteteetn toteeteec eteneetnet entteneene
                                                                         840
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                                                                        120
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                                                                        180
cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa
                                                                        240
aaaagtgett gaagataata tgettgttaa aagteateae eattetoldsymbol{\dot{q}}taa teteaagtae
                                                                        300
cagggacac aatacactge ggaaggeege agggaeetet gtetaggaaa geeaggtatt
                                                                        360
stccaagatt tetececatg tgatageetg agatatggee teatgggaag ggtaagaeet
                                                                        420
gactgtcccc cagcccgaca tcccccagcc cgacatcccc cagcccgaca cccgaaaagg
                                                                        480
dtctgtgctg aggaagatta ntaaaagagg aaggctcttt gcattgaagt\aagaagaagg
                                                                        540
ctctgtctcc tgctcgtccc tgggcaataa aatgtcttgg tgttaaaccc qaatgtatgt
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                                                                        660
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                                                                        780
cctattggcc tgcccatccc ctccccaaan ggtgaaaana tgttcntaaa tncgagggaa
                                                                        840
tecaaaaent ttteeegttg gteeeettte caaceeegte eetgggeenn ttteeteece
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aacntgteee ggnteetten tteeeneeee etteeengan aaaaaaeeee gtntganggn
                                                                        960
```

```
gccccctcaa attataacct ttccnaaaca aannggttcn aaggtggttt gnttccggtg
                                                                       1020
 cggctggcct tgaggtcccc cctncacccc aatttggaan ccngttttt ttattgccn
                                                                       1080
 ntcccc
                                                                       1086
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                                                                        120
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                                                                        360
 aaacacctca ncncnnaagg ctgaatt\gat cgccctcact caggctctcg gatggggtaa
                                                                       420
 gggatattaa cgttaacact gacagcaggt acgcctttgc tactgtgcat gtacgtggag
                                                                       480
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 catcaaaagg aaaacnnggc tgttgcccgt ggtaaccana aanctgatcn ncagctcnaa
                                                                       600
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                                                                       660
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                                                                       720
accaataaaa acggggangg tnggtnganc nhcctgaccc aaaaataatg gatcccccgg
                                                                       780
getgeaggaa tteaattean eettatenat adeceeaaen nggngggggg ggeengtnee
                                                                       840
cattnecect ntattnatte tttnnccece cedecegent cetttttnaa etegtgaaag
                                                                       900
ggaaaacctg nettaccaan ttateneetg gacknteece tteeneggtn gnttanaaaa
                                                                       960
aaaagcccnc antcccntcc naaatttgca cngaaaggna aggaatttaa cctttatttt
                                                                      1020
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                                                                      1080
aaanagaang tttatttttc cttngaacca tcccaatana aancacccgc nggggaacgg
                                                                      1140
ggnggnaggc cnctcacccc ctttntgtng gngggn&
                                                                      1177
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      <211> 1146
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                                                                      120
agactccatc agtgaggtca aagcctgggg cttttcagag aagggaggat tatgggtttt
                                                                      180
caattatac aagtcagaag tagaaagaag ggacataaac caggaag�gg gtggagcact
                                                                      240
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	/					
catcacc	cag agggacttgt	gcctctctca	gtggtagtag	aggggtact	tecteccace	300
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GGGGGG	aat tagggagaga	tnaagcoccc	caatttccng	gnctngatnn	gtttcccccc	1020
ncaacat	ttt ccnaaacttt	ttcccancna	ggaancence	ctttttttng	gtcngattna	1080
atagan	tcc aaaccatttt	ccennaaana	ntttgntngg	ngggaaaaan	acctnntttt	1140
acagan		\				1146
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	213> Homo sapier	n				
	F		\			
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tattggct	tet gagttetgag g	gccagttttc	ttct/tctgtt	gagtatgcgg	gattgtcagg	180
cagatete	ggc tgtggaaagg a	agactgtggg	cagcaagttt	agaggcgtga	ctgaaagtca	240
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cttttgat	igt cotttacagt o	gattacagc	cacctgctga	ggtgagtagc	ccacgetect	360
ggtagate	ggc tccacgtaca t	gcacagtag	caaaggdgta	cctgctqtca	gtgttaacgt	420
taatatee	ctt accccatcgg a	ıgagcctgag	tgagggcgat	caattcagcc	cttttgtgct	480
gaggtgtt	tg ctggttaagc c	ctgaaccca	caacacatct	gtctccatgg	taacagctgc	540
accgg			\			545
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	:11> 150 :12> DNA		/			
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	Supicin	•		\		
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ctctacga	aa aaataaaaaa a	tgageetgg 1	tgtagtggca	cacaccage s	Jagaeeeeae	180
aatcgagc	ct aggaga	0 0 00	3 - 3 - 33	7.000.302	uggugggug	196
				\		100
	10> 12			\		
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				_		

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                                                                          120
 aataaaataa ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac
                                                                          180
 taagtgacat taaatatcag aatgtaaaac ctgggaacca ggttcccagc ctgggattaa
                                                                          240
 actgacagca agaagactga acagtactac tgtgaaaagc ccgaagnggc aatatgttca
                                                                          300
 ctctaccgtt gaaggatggc \tgggagaatg aatgctctgt cccccagtcc caagctcact
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tactatacct cctttatagc (taggaga
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                                                                         120
acaagatatg atttctacat cagatget t ttcctttcct gtttatttcc tttttatttc
                                                                         180
ggttgtgggg tcgaatgtaa tagctttgt tcaagagaga gttttggcag tttctgtagc
                                                                         240
ttctgacact gctcatgtct ccaggcatct atttgcactt taggaggtgt cgtgggagac
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                                                                         337
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                                                                         120
aaaatcatat ttcatatttt acgctcgagg gtttttaccg gttccttttt acactcctta
                                                                         180
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                                                                         240
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                                                                         300
atttgcaacc aagaaaaaaa aatttttttg ttttatttga aactggaccg qataaacqqt
                                                                         360
gtttggagcg gctgctgtat atagttttaa atggtttatt gcalag{1}{2}ctcctt aagttgcact
                                                                         420
tatgtggggg ggggnttttg natagaaagt ntttantcac anagtcacag ggacttttnt
                                                                         480
cttttggnna ctgagctaaa aagggctgnt tttcgggtgg gggcagatga aggctcacag
                                                                         540
gaggcctttc tcttagaggg gggaactnct a
                                                                         571
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      <211> 548
      <212> DNA
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       <220
       <221>\misc_feature
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                                                                         120
 tececeacce geactgapac tteacettet aactgtetac etaaccaaat tetaceette
                                                                         180
 aagtetttgg tgegtgetea etaetetttt ttttttttt tttnttttgg agatggagte
                                                                         240
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                                                                         300
 ctcccaggtt catgagattd tcctgnttca gccttcccag tagctgggac tacaggtgtg
                                                                         360
 catcaccatg cctggntaat \cttttttngt tttngggtag agatgggggt tttacatgtt
                                                                         420
ggccaggntg gtntcgaact dctgacctca agtgatccac ccacctcagg ctcccaaagt
                                                                         480
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                                                                         548
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      <223> n = A, T, C \text{ or } G
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tteegttatg cacatgeaga atattetate ggbactteag etattaetea ttttgatgge
                                                                         60
gcaatccgag cctatcctca agatgagtat ttadaaagaa ttgatttagc gatagaccaa
                                                                         120
gctggtaagc actctgacta cacgaaattg ttcaqatgtg atggatttat gacagttgat
                                                                         180
ctttggaaga gattattaag tgattatttt aaaggggaatc cattaattcc agaatatctt
                                                                         240
ggtttagctc aagatgatat agaaatagaa cagaaaqaga ctacaaatga agatgtatca
                                                                         30C
ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca
                                                                         360
catagogatt ttootgatga atottatatt cagocatoga catagoatta cotgatgggo
                                                                         420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt
                                                                         480
tggatatnac aaaatataac tcgattgcat ttggatgat& gaatactaaa tctggcaaaa
                                                                         540
gtaactttgg agctactagt aacctctctt tttgagatgc\aaaattttct tttagggttt
                                                                        600
cttattctct actttacgga tattggagca taacggga
                                                                        638
      <210> 17
      <211> 286
      <212> DNA
      <213> Homo sapien
      <400> 17
actgatggat gtcgccggag gcgaggggcc ttatctgatg ctcggctgcc tgttcgtgat
                                                                         60
gtgcgcggcg attgggctgt ttatctcaaa caccgccacg gcggtgctga tggcgcctat
                                                                        120
tgccttagcg gcggcgaagt caatgggcgt ctcaccctat ccttttgc\dot{q}a tggtggtggc
                                                                        180
```

```
gatggcggct tc\gcggcgt ttatgacccc ggtctcctcg ccggttaaca ccctggtgct
                                                                          240
 tggccctggc aagtactcat ttagcgattt tgtcaaaata ggcgtg
                                                                           286
       <210> 18
       <211> 262
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(262)
       \langle 223 \rangle n = A, T, C d_{r} G
       <400> 18
teggteatag cageceette ttedcaattt catetgteae taeeetggtg tagtatetea
                                                                           60
 tagecttaca tttttatage etce#ceetg gtetgtettt tgatttteet geetgtaate
                                                                          120
catatcacac ataactgcaa gtaaaqattt ctaaagtgtg gttatgctca tgtcactcct
                                                                          180
gtgncaagaa atagtttcca ttaccgtctt aataaaattc ggatttgttc tttnctattn
                                                                          240
tcactcttca cctatgaccg aa
                                                                          262
       <210> 19
       <211> 261
       <212> DNA
       <213> Homo sapien
       <400> 19
toggtoatag caaagocagt ggtttgagot oto	auactgtg taaactoota aaccaaggoo
                                                                           60
atttatgata aatggtggca ggatttttat tataaacatg tacccatgca aatttcctat
                                                                          120
aactctgaga tatattcttc tacatttaaa caataqaaat aatctatttt taaaagccta
                                                                          180
atttgcgtag ttaggtaaga gtgtttaatg agagggtata aggtataaat caccagtcaa
                                                                          240
cgtttctctg cctatgaccg a
                                                                          261
      <210> 20
      <211> 294
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(294)
      \langle 223 \rangle n = A,T,C or G
      <400> 20
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                                                                          60
cgataggcgc cggccagcca gcggaacggt tgcccggatg gcgaagcgagt ccggagttct
                                                                         120
teggaetgag tatgaatett gttgtgaaaa taetegeege ettegttega egaegtegeg
                                                                         180
tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc\ggtcagttcc
                                                                         240
gccccaccga aatcatggtt gagccggatg ctgnccccga agncctcgtt tgtn
                                                                         294
      <210> 21
      <211> 208
```

```
<\212> DNA
        <2\13> Homo sapien
        <220>
        <221 misc_feature
              (1)...(208)
        \langle 223 \rangle \dot{\eta} = A, T, C \text{ or } G
       <400> 21
 ttggtaaagg gcatqgacgc agacgcctga cgtttggctg aaaatctttc attgattcgt
                                                                            60
 atcaatgaat aggaaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntgtt
                                                                           120
 gttctcatgg anaagg caan gagctcttca gactattggn attntcgttc ggtcttctgc
                                                                           180
 caactagtcg ncttgcnang atcttcat
                                                                           208
       <210> 22
       <211> 287
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(287)
       <223> n = A,T,C or G
       <400> 22
nccnttgagc tgagtgattg agatntgta tggttgtaag ggtgattcag gcggattagg
                                                                           60
gtggcgggtc acccggcagt gggtctcccg\acaggccagc aggatttggg gcaggtacgg
                                                                           120
ngtgcgcatc gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac
                                                                          180
ggcgctggag ctttccacgg tccatgnatt gagatggctg ttctaggcgg ctgttgccaa
                                                                          240
gcgtgatggt acgctggctg gagcattgat tt\tggtgcc aaggtgg
                                                                          287
       <210> 23
       <211> 204
       <212> DNA
       <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(204)
      <223> n = A, T, C \text{ or } G
      <400> 23
ttgggtaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact
                                                                           60
gggccaaget gtegeegggg atggtggaga actgaagegg gaeeteeteeg
                                                                          120
nesttactte neegteeagg aggagggtet tteegtggte tnggaggage ggggggagaa
                                                                          180
gatnetecte atggtenaca tece
                                                                          204
      <210> 24
      <211> 264
      <212> DNA
      <213> Homo sapien
```

```
<220
       <221>\
             misc_feature
       <222>
             (1)...(264)
       \langle 223 \rangle n \neq A,T,C or G
       <400> 24
tggattggtc aggagcggt agagtggcac cattgagggg atattcaaaa atattatttt
                                                                          60
gtcctaaatg atagttgdtg agtttttctt tgacccatga gttatattgg agtttatttt
                                                                         120
ttaactttcc aatcgcatgg acatgttaga cttattttct gttaatgatt nctattttta
                                                                         180
ttaaattgga tttgagaaat tggttnttat tatatcaatt tttggtattt gttgagtttg
                                                                         240
acattatagc ttagtatgtg acca
                                                                         264
      <210> 25
      <211> 376
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(376)
      <223> n = A, T, C \text{ or } G
      <400> 25
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtgg
                                                                          60
tgcacccgca atcccagcta cttgggaggt tgagacacaa gantcaccta natgtgggag
                                                                         120
gtcaaggttg catgagtcat yattgtgcca ctgcactcca gcctgggtga cagaccgaga
                                                                         180
ccctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gcccagcaat
                                                                         240
ctgcatctat ncaacccctg caggcaange tgatgcagcc tangttcaag agetgetgtt
                                                                         300
tctggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct
                                                                         360
gtcctccgtn tgtnac
                                                                         376
      <210> 26
      <211> 372
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(372)
      <223> n = A, T, C or G
      <400> 26
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtgg
                                                                         60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgtggag
                                                                         120
ggtcaaggtt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag
                                                                         180
accetgeete aaaagaaaaa gaataggaag tteagaaace etgggtgtgg ngeceageaa
                                                                         240
tetgeattta aacaateeet geaggeaatg etgatgeage etaagtteaa gagetgetgt
                                                                         300
tetggaggea gnagtaaggg ettecateea geateaeggn caacaetgea aaageacetg
                                                                         360
tcctcgttgg ta
                                                                         372
```

```
₹210> 27
       <2\11> 477
       <21\2> DNA
      <213 Homo sapien
      <400> 27
ttetgteeae at\etacaagt tttatttatt ttgtgggttt teagggtgae taagttttte
                                                                          60
cctacattga aaa gagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata
                                                                         120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt ttttttagag
                                                                        180
tcacctctta aagtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgttctacc
                                                                        240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat
                                                                        300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct
                                                                        360
gacttttttt gggaaaaaat gtcaatttgg tccataaaat acatgttact
                                                                        420
attaaaagat atttaaaga aaattettte agagetetaa gattggtgtg gacagaa
                                                                        477
      <210> 28
      <211> 438
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(438)
      \langle 223 \rangle n = A,T,C or G
      <400> 28
tetneaacet ettgantgte aaaaacettn\taggetatet etaaaagetg aetggtatte
                                                                         60
attocagoaa aatoootota gtttttggag tttcctttta ctatctgggg ctgcctgagc
                                                                        120
cacaaatgcc aaattaagag catggctatt t\cggggggct gacaggtcaa aaggggtgta
                                                                        180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgcccctg
                                                                        240
gacgacttca atcgnettag acaagtttat aggtttetgg geageteect gaatacceae
                                                                        300
gaggagatac cggtggaaat cgtcaaaagt tctc&ctcca cttgagaaat ttgggtccca
                                                                        360
attaggtccc aattgggtct ctaatcacta ttcct&tagc ttcctcctcc ggnctattgg
                                                                        420
ttgatgtgag gttgaaga
                                                                        438
      <210> 29
      <211> 620
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(620)
      <223> n = A, T, C \text{ or } G
      <400> 29
aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagct gtgggtgcac
                                                                         60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca
                                                                        120
cctaacacct agatattcag acaaaagttt actacaggga tgaagctt\circ acggaaaacc
                                                                        180
tctactagga aagtacagaa gagaaatgtg ggtttggagc ccccaaaca& aatcccctct
                                                                        240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat
                                                                        300
```

```
agacccacca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc
                                                                     360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc
                                                                     420
ccaggecatg gaagcacagoldsymbol{\lambda} tettatatea atgtgacetg gatgttgaga catggaatec
                                                                     480
nangaaatcn ttttaanact\tccacggttn aatgactgcc ctattanatt cngaacttan
                                                                     540
atconggect gtgacetett tgetttggee atteceeett tttggaatgg etntttttt
                                                                     600
cccatgcctg tnccctctta
                                                                     620
      <210> 30
      <211> 100
      <212> DNA
      <213> Homo sapien
      <400> 30
ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc ttttttttt
                                                                      60
ttttttttt tttttttt ttttttttttttt
                                                                     100
      <210> 31
      <211> 762
      <212> DNA
      <213> Homo sapien
     <220>
      <221> misc feature
      <222> (1)...(762)
     <223> n = A, T, C or G
     <400> 31
tagtotatgo googgacaga goagaattaa attggaa\forallit goodtoogga otttotacoo
                                                                      60
acactettee tgaaaagaga aagaaaagag geaggaaaga ggttaggatt teattiteaa
                                                                     120
gagtcagcta attaggagag cagagtttag acagcagt&g gcaccccatg atacaaacca
                                                                     180
tggacaaagt ccctgtttag taactgccag acatgatcct gctcaggttt tgaaatctct
                                                                     240
ctgcccataa aagatggaga gcaggagtgc catccacatd aacacgtgtc caagaaagag
                                                                     300
teteagggag acaagggtat caaaaaacaa gattettaat\gggaaggaaa teaaaceaaa
                                                                     360
aaattagatt tttctctaca tatatataat atacagatat |ttaacacatt attccagagg
                                                                     420
tggctccagt ccttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc
                                                                     480
teteaaatte tgaagtatat eagaatggga eaggeaatgt t‡tgeteeae aetggggeae
                                                                     540
agacccaaat ggttctgtgc ccgaagaaga gaagcccgaa agacatgaag gatgcttaag
                                                                     600
gggggttggg aaagccaaat tggtantatc ttttcctcct gc&tgtgttc cngaagtctc
                                                                     660
cnctgaagga attettaaaa ccctttgtga ggaaatgccc cct/taccatg acaantggtc
                                                                     720
ccattgcttt tagggngatg gaaacaccaa gggttttgat cc
                                                                     762
     <210> 32
     <211> 276
     <212> DNA
     <213> Homo sapien
     <400> 32
tagtctatgc gtgtattaac ctcccctccc tcagtaacaa ccaaagaggc aggagctgtt
                                                                      60
120
¢acaaccagt aaattggcag agtcagattt gaatccatgg agtctggtct∤ gcactttcaa
                                                                     180
¢cacegaata ceetttetaa gaaaegtgtg etgaatgagt geatggataa\ateagtgtet
                                                                     240 -
```

					276
actcaacatc tttgcctaga	tatcccgcat	agacta			276
<210> 33					
<211> 477 \					
<212> DNA \					
<213> Homo sapie	n				
\					
<400> 33					
tagtagttgc caaatatttg					60
aaacaaataa agccaaaagg	taaaataaaa	atatctttgc	actctcgtta	ttacctatcc	120
ataacttttt caccgtaagc					180
tagttattat tttttattca					240
tgatctcatt tcatttttc					300
caagcccatt atctttttc					360
tcccattaaa aaattgtaaa	tatgttcagt	ttatgtttaa	aaatgcacaa	aacataagaa	420
aattgtgttt acttgagctg	ctgattgtaa	gcagttttat	ctcaggggca	actacta	477
	\				
<210> 34	\				
<211> 631	\				
<212> DNA	\				
<213> Homo sapie	n \				
	\				
<400> 34			+	attattaaaa	60
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cgcatgccat ttggaacttt	ggcagtgaga	agccaaaagg	aagaggtgaa	cttatacacac	180
atatatatat attcaatgaa	agtaaaatgt	atatgeteat	atacttteta	gitateagaa	240
tgagttaagc tttatgccat	tgggctgctg	catattttaa	tcagaagata	adagadaate	300
tgggcatttt tagaatgtga	tacatgtttt	ttaaaactg	ttaaatatta	agaagagaaa	360
tgtctaagaa ccggaatgtt	cttaaaattt	actaaaacag	tattgtttga	ggaagagaaa	420
actgtactgt ttgccattat	tacagtcgta	caagtgcatg	ccaagccacc	agatagtaa	480
ggcatcagta tccacctcat	agetttacae	atticgacgg	ggaatattgt	ageaceecea	540
ggcctgacat ctgggaaagg	ctcagatcca	cetaetgete	ertgereger	gattigtttt	600
aaaatattgt gcctggtgtc			CCLaaaagcc	agcagagaac	631
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<212> DNA		\			
<213> Homo sapie	on.	\			
(213) Nomo Sapic	.11	\			
<400> 35		,	\		
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actgatacca tgaaacctac	ttggagcaga	cattgcacag	tt\tctgtgg	taaaaactaa	180
aggtttattt gctaagctgt	catcttatgc	ttagtatttt	ttt/tttacag	tggggaattg	240
ctgagattac attttgttat	tcattagata	ctttgggata	act#gacact	gtcttcttt	300
tttcgctttt aattgctatc	atcatgcttt	tgaaacaaga	acacattagt	cctcaagtat	360
tacataagct tgcttgttac	gcctggtggt	ttaaaggact	atctttggcc	tcaggttcac	420
aagaatgggc aaagtgtttc	cttatgttct	gtagttctca	ataaaagatt	gccaggggcc	480
gggtactgtg gctcgcactg	taatcccagc	actttgggaa	gctgaggctg	gcggatcatg	540
ttagggcagg tgttcgaaac					578
	5 .555		\		

```
<21\0> 36
      <21 \( > 583
      <212
            DNA
           \Homo sapien
      <213>
      <400> 36
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                                                                         60
gggaggcaga agtt\gtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag
                                                                        120
agtgagatto catotcaaaa acaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata
                                                                        180
aacccagcca aaacadaatg atcattcttt taataagcaa gactaattta atgtgtttat
                                                                        240
ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa tacccatgta gttaatttag
                                                                        300
ggttcttact tgggtgaacg tttgatgttc acaggttata aaatggttaa caaggaaaat
                                                                        360
gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg ataggtgcta
                                                                        420
tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgctc attggttgtc
                                                                        480
tggtaatttc cattaggaaa\aggttatgat atggggaaac tgtttctgga aattgcggaa
                                                                        540
tgtttctcat ctgtaaaatg &tagtatctc agggcaacta cta
                                                                        583
      <210> 37
      <211> 716
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(716)
      <223> n = A, T, C \text{ or } G
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gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact
                                                                         60
gctttcttgt tctttaatcc agacccttat atakgtttat gttcacaggc agggcaatgt
                                                                        120
ttagtgaaaa caattctaaa ttttttattt tgcattttca tgctaatttc cgtcacactc
                                                                        180
cagcaggett cetgggagaa taaggagaaa tacagataaa gacattgtee etgettaett
                                                                        240
acagcctaat ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta
                                                                        300
                                                                        360
gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt
cctagaatgt acaaggcttt ttaattacat attttatgba aggcctgcaa aaaacaggtg
                                                                        420
                                                                        480
agtaatcaac atttgtccca ttttacatat aaggaaact aagcttaaat tgaataattt
aatgcataga ttttatagtt agaccatgtt caggtcccta \tgttatactt actagctgta
                                                                        540
tgaatatgag aaaataattt tgttattttc ttggcatcag tattttcatc tgcaaaataa
                                                                        600
agctaaagtt atttagcaaa cagtcagcat agtgcctgat adatagtagg tgctccaaac
                                                                        660
atgattacnc tantattngg tattanaaaa atccaatata ggdntggata aaaccg
                                                                        716
      <210> 38
      <211> 688
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(688)
      <223> n = A, T, C or G
```

\	
<400 38	60
ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca	120
tccattttaa caggatcac accaggaaac tgaaggtgta tttttttta ccttaaaaaa	180
aaaaaaaaaa adcaaacaaa ccaaaacaga ttaacagcaa agagttctaa aaaatttaca tttctcttac aadtgtcatt cagagaacaa tagttcttaa gtctgttaaa tcttggcatt	240
aacagagaaa cttgatgaan agttgtactt ggaatattgt ggattttttt ttttgtctaa	300
totococota ttgt ttgoc aacagtaatt taagtttgtg tggaacatco cogtagttga	360
agtgtaaaca atgtatagga aggaatatat gataagatga tgcatcacat atgcattaca	420
tgtagggacc ttcacaactt catgcactca gaaaacatgc ttgaagagga ggagaggacg	480
gcccagggtc accatcdagg tgccttgagg acagagaatg cagaagtggc actgttgaaa	540
tttagaagac catgtgtgaa tggtttcagg cctgggatgt ttgccaccaa gaagtgcctc	600
cgagaaattt ctttcccatt tggaatacag ggtggcttga tgggtacggt gggtgaccca	660
acgaagaaaa tgaaattctg ccctttcc	688
<210> 39	
<211> 585	
<212> DNA \	
<213> Homo sapien \	
<220>	
<221> misc_feature \	
<222> (1)(585)	
$\langle 223 \rangle$ n = A,T,C or G \setminus	
100 20	
<400> 39 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	60
tagtagttgc cgcnnaccta aaanttggaa agcatgatgt ctaggaaaca tantaaaata gggtatgcct atgtgctaca gagagatgth agcatttaaa gtgcatantt ttatgtattt	120
tgacaaatgc atatnoctot ataatooaca\actgattacg aagotattac aattaaaaag	180
tttggccggg cgtggtgggc ggtggctgac gcctgtaatc ccagcacttt gggaggccga	240
ggcacgcgga tcacgaggtc gggagttcaa gaccatcctg gctaacacgg tgaaagtcca	300
tetetactaa aaataegaaa aaattaceee gaegtggtgg egggegeetg tagteeeage	360
tactccggag gctgaggcag gagaatggcg tgaacccagg acacggagct tgcagtgtgc	420
caacatcacg teactgeett ceagectggg ggacaggaac aaganteecg teeteanaaa	480
agaaaaatac tactnatant ttcnacttta ttttaantta cacagaactn cctcttggta	540
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<213> Homo sapien	
<400> 40	C 0
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gaatttcagc acactgagtt gggaatttct tatcccagaa gaccaaccaa tttcatattt	240
attaagatt gattccatac tccgttttca aggagaatcc ttgcagtctc cttaaaggta	300
gaacaaatac ttcctatttt tttttcacca ttgtgggatt gaactttaag aggtgactct	360
aaaaaaaaaa agaacaaata tgtctcagtt gtattaagca cggacccata ttatcatatt	
cacttaaaaa aatgatttcc tgtgcacctt ttggcaactt ctottttcaa tgtagggaaa aacttagtca ccctgaaaac ccacaaaata aataaaactt gtagatgtgg acaga	420 475

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<210> 44

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<210> 41
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           423
      <212>
            DNA
      <213> Nomo sapien
      <400> 41
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                                                                        120
                                                                        180
ttatttagaa agaacadata cggagagata agggcaaagg actaagacca gaggaacact
aatatttagt gatcacttcc attcttggta aaaatagtaa cttttaagtt agcttcaagg
                                                                        240
                                                                        300
aagatttttg gccatgatta gttgtcaaaa gttagttctc ttgggtttat attactaatt
ttgttttaag atccttgtta\gtgctttaat aaagtcatgt tatatcaaac gctctaaaac
                                                                        360
                                                                        420
attgtagcat gttaaatgtc acaatatact taccatttgt tgtatatggc tgtaccctct
                                                                        423
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      <211> 527
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
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      <223> n = A, T, C or G
      <400> 42
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aaaaagctta tagaataaga atatgaagaa agaaaatatt tttgtacatt tgcacaatga
                                                                        120
gtttatgttt taagctaagt gttattacaa aaga¶ccaaa aaggttttaa aaattaaaac
                                                                        180.
gtttgtaaag ttacagtacc cttatgttaa tttatkattg aagaaagaaa aactttttt
                                                                        240
                                                                        300
tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg
                                                                        360
tectaggeet teacatteae teactgaete acceagagea acttecagte etgtaagete
                                                                        420
cattcgtggt aagtgcccta tacaggtgca ccatttatt tacagtattt ttactgtacc
ttctctatgt ttccatatgt ttcgatatac aaataccadt ggttactatn gcccnacagg
                                                                        480
                                                                        527
taattccagt aacacggcct gtatacgtct ggtancccta gngaaga
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      <211> 331
      <212> DNA
      <213> Homo sapien
      <400> 43
                                                                         60
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gctgcccttc tttaagaaaa aaaaaagaag aaaaaagaac ttttccacaa gtttctcttc
                                                                        120
ctctagttgg aaaattagag aaatcatgtt tttaattttg tgttatttta gatcacaaat
                                                                        180
tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat
                                                                        240
att tacggtt caaaagaagt tgtaatattg tgcttggaac acagagaacc agttattaac
                                                                        300
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ttcctactac tattatataa taaataataa c
```

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<211> 592
      <21\2> DNA
      <213> Homo sapien
      <220>
      <221>\misc_feature
            (1)...(592)
      <222>
      \langle 223 \rangle n = A,T,C or G
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                                                                         120
cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt
                                                                         180
atataagcag aaatctggag aagagtcata ggaatggata ttaagggtgt gagataatgg
                                                                         240
cggaaggaat atagagttgg atcaggctgg acttattgat ttgaacccac taagtagaga
                                                                         300
ttctgctttt gatgttgcag ctcagggagt taaaaaaggt tttaatggtt ctaatagttt
                                                                         360
atttgcttgg ttagctgaa tatggataaa agatggccca ctgtgagcaa gctggaaatg
                                                                         420
cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttggatg
                                                                         480
ctggraktgg attggtcact ttgrgaccta cccwtcccag ctgggagggt ccagaagata
                                                                         540
caccettgae caacgetttd cgaaatggat ttgtgatgge ggcaactaet aa
                                                                         592
      <210> 45
      <211> 567
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(567)
      <223> n = A, T, C \text{ or } G
      <400> 45
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                                                                          60
agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg
                                                                         120
ggttggttgg ctttgaaaag atggaaatcc\tgtaggccta gtcagaaaag ccttcttgca
                                                                         180
gaacagttgg ttctcgggcg aacgctcatc agatgccca ttggaaaggc tagcgtgtat
                                                                         240
ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat
                                                                         300
atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactcctac
                                                                         360
ttatactgtg aggaatgata gccaagggtg gggactttaa gactaaggtg gtttgtactt
                                                                         420
gcgccgatga tcccaggcag aaagamctga tcg&tagttt tatacgggca actactaagc
                                                                         480
                                                                         540
cgaattccag cacactggcg gccgttacta attggatccg anctcggtac cagcttgatg
                                                                         567
catascttga gttwtctata ntgtcnc
      <210> 46
      <211> 908
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(908)
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\langle 223 \rangle n =\A,T,C or G
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                                                                         60
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                                                                        120
geggeagggg egeaageat taatgtgagt aggeeattea ttageaceeg ggettaacat
                                                                        180
ttaagetteg ggttggtatg tggtgggaat tgtgagegga taacaattte acacaggaaa
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cagctatgac catgattack ccaagctatt taggtgacat tatagaataa ctcaagttat
                                                                        300
gcatcaagct tggtaccgag/ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg
                                                                        360
gcttagtagt tgccgaccat \ggagtgctac ctaggctaga atacctgagy tcctccctag
                                                                        420
ceteacteae attaaattgt atettteta cattagatgt ceteagegee ttatttetge
                                                                        480
tggacwatcg ataaattaat ctgatagga tgatagcagc agattaatta ctgagagtat
                                                                        540
gttaatgtgt catccctcct atatacgta tttgcatttt aatggagcaa ttctggagat
                                                                        600
aatccctgaa ggcaaaggaa tgaatcttga gggtgagaaa gccagaatca gtgtccagct
                                                                        660
gcagttgtgg gagaaggtga tathatgtat gtctcagaag tgacaccata tgggcaacta
                                                                        720
ctaagcccga attccagcac actgqcgggc gttactaatg gatccgagct cggtaccaag
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cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcgtta tcatggtcat
                                                                        840
agetgtttee tgtgtgaaat tgttateege teecaattee eeccaceata egageeggaa
                                                                        900
cataaagt
                                                                        908
      <210> 47
      <211> 480
      <212> DNA
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      <220>
      <221> misc_feature
      <222> (1)...(480)
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      <400> 47
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                                                                         60
ggtttttaag gttgttttct gtcaaataac tcta\cttta agccaaacag tatatggaag
                                                                        120
cacagataka atattacaca gataaaagag gagt\( \frac{1}{2} \)gatct aaagtaraga tagttggggg
                                                                        180
ctttaatttc tggaacctag gtctccccat cttcttctgct gctgaggaac ttcttggaag
                                                                        240
cggggattct aaagttcttt ggaagacagt ttgaaaacca ccatgttgtt ctcagtacct
                                                                        300
ttatttttaa aaagtaggtg aacattttga gagagaaag ggcttggttg agatgaagtc
                                                                        360
ecceccece etttttttt ttttagetga aatagatace etatgttnaa rgaarggatt
                                                                        420
attatttacc atgccaytar scacatgctc tttgatggc nyctccstac cctccttaag
                                                                        480
      <210> 48
      <211> 591
      <212> DNA
      <213> Homo sapien
      <400> 48
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tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gagtaccggc
                                                                        120
gaggatggtg gcgtgaattc tggcctttct ttgccgtggg atdggtagcc gccatcatcg
                                                                        180
gtatgtttat caagatette tttaetaace egacetetee gat&taecetg eeegageegt
                                                                        240
ggtttaacga ggggagggg atccagtcac gcgagtactg gtccpagatc ttcgccatcg
                                                                        300
```

	tegtgacaat gedtateaac					360 420
	acteegaaaa egtdeggtgg taacegaate gegedaagga					480
l	agccgaattc cagcacactg					540
l	tgatgcgtaa cttgagttat					591
l	tgatgegtaa ettgagteat	cccacagege	cccaaaaa	acceggegee	~	332
	<210> 49					
	<211> 454					
	<212> DNA \					
	<213> Homo sapi	ę n				
		\				
	<400> 49	\				60
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	gtgtggcyta gtcacaccaa					120
	aagaaagctg ctgtggggaa					180 240
	catcacagag ttttcctttt					300
	gaatgaagwg gtatgatctc					360
	catgcctcag cctcctgagc tttatatttt tattagagac					420
	ggcctcagat gatctgcccc			aggeaggeee	cgaaccccg	454
	ggeeteagat gatetgeete	accycapect	ccca			131
	<210> 50	\				
	<211> 463	\				
	<212> DNA	\				
	<213> Homo sapi	en \				
		'	\			
	<400> 50		\			
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	gctgcataca gcttttttt					120 [.] 180 [.]
	caattgctgg ttttgaaatc					240
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	tgttaccgtg gggtggggtc					360
	ccatctgcat ctgcataggg					420
	agccactgtt catcattggc				55-55-	463
	3 3	555				
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	<212> DNA		\			
	<213> Homo sapi	en	\			
	<400> 51		\			
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	tttttcacta ccctctaagc					120
	tgattacaat aatggaactt	_				180
	cataattatt aagagtatgg					240
	ttgaccttct ctattagtct					300
	ccttgagcta ttacttttta					360
	cccacagtat ttaattatat	catgatgtct	ttgaggttg	\		399
	-			\		
				1		

<210> 52

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       <212
             DNA
             Homo sapien
       <213>
       <400>
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                                                                           60
 gcaataatta tctgagaaaa aaaagtggtg aaagattaaa cttgcatttc tctcagaatc
                                                                          120
 ttgaaggata tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact
                                                                          180
 tagctagaac gttgaccca tggatctaag tccctgccct tccactaacc agctgattgg
                                                                          240
 ttttgtgtaa acctctaca cgcttgggct tggtcgcctc atttgtcaaa gtaaaggctg
                                                                          300
 aaataggaag ataatgaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt
                                                                          360
 acaaagaggc ctgtattccc ctggtgaggt tg
                                                                          392
       <210> 53
       <211> 179
       <212> DNA
       <213> Homo saptien
       <220>
       <221> misc_featu\re
       <222> (1)...(179)
       \langle 223 \rangle n = A,T,C or G
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                                                                          60
tttcagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga
                                                                         1.20
ctagttcagc atacngagac acntctgact ccgattctag aggactgagt gacctgcan
                                                                         179
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      <211> 112
       <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
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                                                                          60
tgcattttcc cacanacaaa attcaaatga ndggaagaaa ttggganagt at
                                                                         112
      <210> 55
      <211> 225
      <212> DNA
      <213> Homo sapien
      <400> 55
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                                                                         60
aaaggagtat atccaaatgc caataaacat ataaaaaaqga attcagcttc atcatcatca
                                                                         120
daagwatgca aattaaaacc ataatgagaa accactatgt cccactagaa tagataaaat
                                                                         180
```

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<211> 175	
<212> DNA	
<213> Homo sapien	
<400> 56	
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ggccataccc tgagggaggg gagggat tc tagtgttgtc agaagcggaa gctca	175
\	
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<212> DNA \	
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teceagetige teetingteac teeetttata gecattacting tettingtitet tigtaacteag	120
gttaggtttt ggtctctctt gctccactgc aaaaaaaaa aaa	180 223
	223
<210> 58	
<211> 211	
<212> DNA	
<213> Homo sapien	
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agtggcagac actgaaaata aggagaatga agttgaagag dtaaaagagg agggtccaaa	120
agagatgact ttggatgggt ggtaaatggc t	180 211
	211
<210> 59	
<211> 208	
<212> DNA	
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\	
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aggetgeaca teaggggaet geetegeaat actteatget gttgetgetg actgatggtg	
120ctgtgacgga tgtggaagcc acacgtgagg ctgtggtgcg tgcctdgaac ctgcccatgt cagtgatcat tatgggtggt aaatggct	180
\ \	208
<210> 60	
<211> 171	
<212> DNA	
<213> Homo sapien	
<400> 60	
, in the second of the second	

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agccatttac cacccatact aaattctagt tcaaactcca acttcttcca taaaacatct	60
aaccactgac accagttggc aatagettet teettetta acctettaga gtatttatgg	120
tcaatgccac acatttctgc aactgaataa agttggtaag gcaagaggag c	171
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$\langle 223 \rangle$ n = A,T,C $\sqrt{\text{pr G}}$	
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<212> DNA	
<213> Homo sapien	
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ccaagctcct tactggtacc ctctt \	145
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<213> Homo sapien	
\	
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ccacagteag egecatggtg gteeggtaaa geattt\gte aggeaggeet egttteaggt	180
agacgggcac acatcagett tetggaaaaa ettttg $t arrangle$ ge tetggagett tgtttteee	240
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\	
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aatgitttac cattiticigi citgccigit titicigigit titigatigite tetteatici	180
ccatttttag gcctttacat gttaggaata tatttctttt aatgatactt cacctttggt	240
- \	

atcttttgtg agactctact catagtgtga taagcactgg gttggtaagg caagaggagc	300
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<211> 203 \ <212> DNA	
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223 Nomo Bapten	
<400> 65	
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aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt	120
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tcgatagaag ttcctctcag tgc	203
<210> 66	
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<212> DNA	
<213> Homo sapien \	
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tgcagtgctg gtagcaggag ttctgtgdtt tgtgggctaa ggctcctgga tgacccctga	120
catggagaag gcagagttgt gtgcccttc tcatggcctc gtcaaggcat catggactgc	180
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact	240
gatgtggctc gtaaccatgg atatggtcad atacagaggt gtgattatgt aaaggttaat tccacccacc tcatgtggaa actagcctca atgcaggggt ccca	300
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	344
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\3	137
<210> 68	
<211> 137	
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taaaaaaaa taaaaaa \	137
\ 	
<210> 69 <211> 137	
<211> 13/ <212> DNA	
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\	

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<4003
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                                                                           120
 gaagttcctc tcagtgc
                                                                           137
       <210> 70
       <211> 220
       <212> DNA
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       <220>
       <221> misc_feature
       <222> (1) ... (220)
       \langle 223 \rangle n = A,T,C \forallr G
       <400> 70
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                                                                           120
cgagggcant ctcatwgaca ggtt caccc accaaactgc aagaggctca nnaagtactr
                                                                           180
ccagggtmya sggacmasgg tggga\rangletyca ycacwcatct
                                                                           220
       <210> 71
       <211> 353
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc feature
       <222> (1)...(353)
      \langle 223 \rangle n = A,T,C or G
      <400> 71
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                                                                           60
teccanetaa atatgecaag tgaetteaca tgtttatett aaagatgtee aaaacgeaac
                                                                          120
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ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgat\gc aagcataatc
                                                                        120
aaacqctqtt ctqttaattc caagttataa ctggcattga ttaaagcatt atctttcaca
                                                                        180
actaaactgt tottoatana acagoccata ttattatcaa attaagagac aatgtattoo
                                                                        240
aatatccttt anggccaata tatttnatgt cccttaatta agagctactg tccgt
                                                                        295
      <210> 156
      <211> 406
      <212> DNA
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<2\lambda_3> Homo sapien
       <2203
       <221>\misc_feature
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       \langle 223 \rangle n = A,T,C or G
       <400> 15è
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                                                                         120
 aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaagggggtg tnaatgtnta
                                                                         180
 tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg
                                                                         240
 cgggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt
                                                                         300
 tgaaagtetg tgtgtgtgcq tgtggteatg anggtaantt antgaetgeg caggatgtgt
                                                                         360
 gagtgtgcat ggaacactca\ntgtgtgtgt caagtggccn ancgtc
                                                                         406
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      <400> 157
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ggcatgtgag tgcatctatt cacttggcac tcatttgttt ggcagtgact gtaanccana
                                                                         120.
tctgatgcat acaccagett gtaaattgaa taaatgtete taatactatg tgeteacaat
                                                                         180
anggtanggg tgaggagaag gggagaga
                                                                         208
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      <211> 547
      <212> DNA
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      <220>
      <221> misc_feature
      <222> (1)...(547)
      <223> n = A, T, C \text{ or } G
      <400> 158
cttcaacctc cttcaacctc ctggattcaa acaatcatcc cacctcagac
                                                                         60
tccttagtag ctgagactac agactcacgc cactacatct ggctaaattt ttgtagagat
                                                                        120
agggtttcat catgttgccc tggctggtct caaactcctg acctcaagca atgtgcccac
                                                                        180
ctcagcctcc caaagtgctg ggattacagg cataagccac catgcccagt ccatntttaa
                                                                        240
tettteetae cacattetta ecacaettte ttttatgttt agatacataa atgettaeca
                                                                        300
ttatgataca attgcccaca gtattaagac agtaacatgc tgcacaggtt tgtagcctag
                                                                        360
gaacagtagg caataccaca tagcttaggt gtgtggtaga ctataccatc taggtttgtg
                                                                        420
taagttacac tttatgctgt ttacacaatg acaaaaccat ctaatgatge atttctcaga
                                                                        480
```

and the control of th

atgtateett gteagtaage tatgatgtae agggaacaet geecaagga tacetgt	c acagatattg	540 547
<210> 159 <211> 203		
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togatagaag ttoctotoag tgo	a tycatttarg	180 203
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aggacagggt catgagaraa gtatggattt	c acttaaactc	180
aggacagggt catgagaraa gtatgcattt gaaagttggt gctagctatgctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg	ctttaaaaac	240
ttcagcctga tggcagaatt agatcatatc tgcactcgat gactytgctt	g tgcatttcag	300 360
cactgaaatc tgagtgttga tcatcacact gctcgactta ca	gacaacccac	402
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<211> 193		
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actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggt	aataataaaa	120
gctcaacatg cta	gigigicigg	180 193
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tggtgtgtgt ctgggctcaa catgcta	geggatatag	120 147
<210> 163	\	
<211> 294	\	

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The state of the s
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            Homo sapien
       <400> 163
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                                                                         60
 tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tattttgatt
                                                                        120
 tgggttctta tctccdtcac attatcttca tttctatcat tgacctctta tcccagagac
                                                                        180
 tctcaaactt ttatgttata caaatcacat tctgtctcaa aaaatatctc acccacttct
                                                                        240
 cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta
                                                                        294
       <210> 164
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      <221> misc_feature
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      <400> 164
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                                                                         60
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                                                                        120
gatgaactcc accgccctga aggaagccca ggccaccgga tacccccgcg acaagatgta
                                                                        180
cggcgtgtgg tgggccggtg cggagcccga tgtgcgtgac gtgggcgaag gcgccaaggg
                                                                        240
ctacaacgcg ctggctctga acggctacgg cacgcatcc aaggtgatcc angacatcct
                                                                        300
gaaacacgtg cacgacaagg gccagggcac ggggcckaaa gacgaagtgg gctcggtgct
                                                                        360
gtacacccgc ggcgtgatca tccagatgct ggacaagqtg tcaatcacta at
                                                                        412
      <210> 165
      <211> 361
      <212> DNA
      <213> Homo sapien
      <400> 165
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gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaag
                                                                       120
gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca
                                                                       180
ggtgtggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct
                                                                       240
tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat
                                                                       300
tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg/acaaggtgtc
                                                                       360
                                                                       361
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      <211> 427
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      <400> 166
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tetgateetg acttagggga atatttett tttactteec atettgatte eetgeeggtg
                                                                       120
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agtttcctgg tbcagggtaa gaaaggagct caggccaaag taatgaacaa atccatcctc 180 acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac 240 mcttamctag gatracaamc mcrraratar ktgcycmcmc wtataataga aaccaaactt 300 gtatctaatt aaatattat ccacygtcag ggcattagtg gttttgataa atacgctttg 360 gctaggattc ctgagdttag aatggaaraa caattgcamc gagggtaggg gacatgagtc 420 aktctaa 427 <210> 167 <211> 500 <212> DNA <213> Homo sapi\en <220> <221> misc_feature <222> (1)...(500) $<223> n = A,T,C or \delta$ <400> 167 aacgtcgcat gctcccggcc gccatggccg cgggatagac tgactcatgt cccctaagat 60 ₫ agaggagaca cetgetaggt gtaagga\daga gatggttagg tetaeggagg etecagggtg 120 I ggagtagttc cctgctaagg gagggtagac tgttcaacct gttcctgctc cggcctccac 180 Į. tatagcagat gcgagcagga gtaggagagag gggaggtaag agtcagaagc ttatgttgtt 240 Par ripus tatgcgggga aacgccrtat cgggggcagc\cragttatta ggggacantr tagwyartcw 300 Ó agntagcatc caaagegngg gagttnteee atatggttgg acctgeagge ggeegeatta 360 IJ gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg 420 IJ ctgattactt aacatgaatt attgtattta ttbaacaact ttgagttatg aggcatatta 480 Ŧ: ttaggtccat attacctgga 500 <210> 168 Ш <211> 358 N <212> DNA ليا <213> Homo sapien <400> 168 ttcatcgctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggggagcaga 60 tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtqacaacc cgtctctgct 120 aaaaatacaa aaattagcca agcatggtgg catgcacttg taatccagc tactcgggag 180 gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga 240 gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccat&tca aaaaaaaaa 300 aaaaaaagaa tgatcagagc cacaaataca gaaaaccttg agtcaccgag cgatgaaa 358 <210> 169 <211> 1265 <212> DNA <213> Homo sapien <400> 169 ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatatc ttttaatagt 60 aacatgtatt ttatggacca aattgacatt ttcgactatt ttttcccaaa aaaagtcagg 120 tgaatttcag cacactgagt tgggaatttc ttatcccaga agwcggcacg agcaatt\ca 180 tatttattta agattgattc catactccgt tttcaaggag aatccctgca gtctccttaa 240

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aggtagaaca aatactttct atttttttt caccattgtg ggattggact ttaagaggtg
                                                                   300
actctaaaaa aacagagaac aaatatgtct cagttgtatt aagcacggac ccatattatc
                                                                   360
atattcactt aaaaaaatqa tttcctgtgc accttttggc aacttctctt ttcaatgtag
                                                                   420
ggaaaaactt agtcaccctg aaaacccaca aaataaataa aacttgtaga tgtgggcaga
                                                                   480
argtttgggg gtggacattg/tatgtgttta aattaaaccc tgtatcactg agaagctgtt
                                                                   540
gtatgggtca gagaaaatga \atgcttagaa gctgttcaca tcttcaagag cagaagcaaa
                                                                   600
ccacatgtct cagctatatt attatt ttttatgcat aaagtgaatc atttcttctg
                                                                   660
                                                                   720
tattaatttc caaagggttt taccctctat ttaaatgctt tgaaaaacag tgcattgaca
atgggttgat atttttcttt aa agaaaaa tataattatg aaagccaaga taatctgaag
                                                                   780
cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct
                                                                   840
900
                                                                   960
gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag
tgcatttcaa ctatgtcaat ggtttdtaa tatttattgt gtagaagtac tggtaatttt
                                                                  1020
tttatttaca atatgtttaa agagataaca gtttgatatg ttttcatgtg tttatagcag
                                                                  1080
aagttattta tttctatggc attccagdgg atattttggt gtttgcgagg catgcagtca
                                                                  1140
atattttgta cagttagtgg acagtatt\Diamonda gcaacgcctg atagcttctt tggccttatg
                                                                  1200
                                                                  1260
1265
aaaaa
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totgtgatac tgatootgag otaggaggog otgttoagtoldsymbol{\lambda} aatgggaott ottogtaoto
                                                                   120
                                                                   18C
taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaatttctaa
attttttcta caaccattgt atgcatgttc tcacagcacc acttttgacc aatacttcag
                                                                   240
aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaaacaca atttgtcccg
                                                                   300
ataattatca aacagcacag ctacttgcct taattttaga gttactcaca ttttgtgtgg
                                                                   360
                                                                   383
aacatcacac tgctcgactt aca
      <210> 171
      <211> 383
      <212> DNA
      <213> Homo sapien
      <400> 171
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                                                                    60
ttagctcaac agggtgaagg catgtaaaga atgtggactt ctgaggaatt ttctttaaa
                                                                   120
                                                                    180
aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa
tctagatacc tctacttttt gtttttgctg ttcgacagtt cacaaagacc ttcagcaatt
                                                                    240
tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa
                                                                    300
                                                                    360
tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctctt
                                                                    383
atcatcacac tgctcgactt aca
      <210> 172
      <211> 699
      <212> DNA
      <213> Homo sapien
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                                                                           60
 cggctgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta
                                                                          120
 ggtctgcatg ctggcggggg ctctggccca ggcctcctgg aaagtttctc aggatgggca
                                                                          180
 gcactcgtgg tgctgagcca gcactaaat ggactgctca tgtctgctgt catggagcat
                                                                          240
 ggcagcagca tcacacgcct cttgtggtg tcctgctcgc tggtggtcaa cgccgtgctc
                                                                          300
 tcagcagtcc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt
                                                                          360
 ggcctggcca tgcgcctgta ctatqgcagc cgctagtccc tgacaacttc caccctgatt
                                                                          420
 ccggaccetg tagattgggc gccaccacgatcccctc ccaggcette ctccctctcc
                                                                          480
 catcagcggc cctgtaacaa gtgccttgtg agaaagctg gagaagtgag ggcagccagg
                                                                         540
 ttattctctg gaggttggtg gatgaagggg tacccctagg agatgtgaag tgtgggtttg
                                                                         600
 gttaaggaaa tgcttaccat cccccacctc caaccaagtt nttccagact aaagaattaa
                                                                         660
 ggtaacatca atacctaggc ctgaggaggc atcacccga
                                                                         699
       <210> 173
       <211> 701
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                                                                         120
cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag
                                                                         180.
tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg
                                                                         240
gaaagaactt ttcaatttat agcatcttaa ttgctcagga tttaaattt tgataaagaa
                                                                         300
agctccactt ttggcaggag tagggggcag ggagagagga ggatccatcc acaaggacag
                                                                         360
agacaccagg gccagtaggg tagctggtgg ctggatcagt cacaacggac tgacttatgc
                                                                         420
catgagaaga aacaacctcc aaatctcagt tgcttaatac aacadaagct catttcttgc
                                                                         480
tcacgttaca tgtcctatgt agatcaacag caggtgactc agggaccag gctccatctc
                                                                         540
catatgaget tecatagtea ceaggacaeg ggetetgaaa gtgteet/ca tgeagggaca
                                                                         600
catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaag c acactgcagg
                                                                         660
gcagtgccat cctgctgtat gcctgaggag gcatcacccg a
                                                                         701
      <210> 174
      <211> 700
      <212> DNA
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      <220>
      <221> misc_feature
      <222> (1)...(700)
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      <400> 174
tegggtgatg ceteeteang cecetaaate agagteeagg gteagageea caggagaeag
                                                                         60
```

SultA

```
ggaaagacat agatt\taac cggcccctt caggagattc tgaggctcag ttcactttgt
                                                                        120
 tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact
                                                                        180
 geetggatet geeteecage tetgeeagga accagetgeg tggeettgag etgetgaeae
                                                                        240
 gcagaaagcc ccctgtggac ccagtctcct cgtctgtaag atgaggacag gactctagga
                                                                        300
 accetttece ttggtttggc etcaetttea caggetecea tettgaacte tatetaetet
                                                                        360
 tttcctgaaa ccttgtaaaa gaaaaaagtg ctagcctggg caacatggca aaaccctgtc
                                                                        420
 tctacaaaaa atacaaaaat \tagttgggtg tggtggcatg tgcctgtagt cccagccact
                                                                        480
 tgggaggtgc tgaggtggga ggatcacttg agcccgggag gtggaggttg cagtgagcca
                                                                        540
 agatcatgcc actgcactcc agcctgagta atagagtaag actctgtctc aaaaacaaca
                                                                        600
 acaacaacag tgagtgtgcc tctgtttccg ggttggatgg ggcaccacat ttatgcatct
                                                                        660
 ctcagatttg gacgctgcag cctgaggagg catcacccga
                                                                        700
       <210> 175
       <211> 484
       <212> DNA
       <213> Homo sapien
       <220>
      <221> misc_feature
      <222> (1)...(484)
      \langle 223 \rangle n = A,T,C or G
      <400> 175
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                                                                        120
atgagggaaa atgtcctact gcactgcgaa tttct cattttacc tcccagtcct
                                                                        180
ccttctaaac cagttaataa attcattcca caagtattta ctgattacct gcttgtgcca
                                                                        240
gggactattc tcaggctgaa gaaggtggga ggggaggqgcg gaacctgagg agccacctga
                                                                        300
gccagcttta tatttcaacc atggctggcc catctgagag catctcccca ctctcgccaa
                                                                        360
cctatcgggg catageceag ggatgecece aggeggeeca ggttagatge gteeetttgg
                                                                        420
cttgtcagtg atgacataca ccttagctgc ttagctggtg\ctggcctgag gaggcatcac
                                                                        480
ccga
                                                                        484
      <210> 176
      <211> 432
      <212> DNA
      <213> Homo sapien
      <400> 176
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catgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg
                                                                       120
acaaatgcc aggtagcgga attggtactg gtccaggagt tatccaggat agattttcac
                                                                       180
caccatggg acgtcatcgt tcaaatcaac tcttcaatgg ccatggggga cacatcatgc
                                                                       240
ctcccacaca atcgcagttt ggagagatgg gaggcaagtt tatgaaaagc caggggctaa
                                                                       300
decageteta ecataaceag agteagggae tettateeca getgeaagga cagtegaagg
                                                                       360
atatgccacc teggttttet aagaaaggac agettaatge agatgagatt ageeqga
                                                                       420
ggcatcaccc ga
                                                                       432
     <210> 177
     <211> 788
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aaataagttt teetttggag gaatgtgatt ataeeeettt aattteetee ttttgetttt

360

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ttttaatatc attggtatgt gtttggccca gaggaaactg aaattcacca tcatcttgac
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                                                                         480
 gagtagccat teetggetae tggettaatg tagteaetea gtttetaggt ggeattagge
                                                                         540
 atgagacctg aagcacagac tgtcttacca caaaaggtga caagatctca aaccttagcc
                                                                         600
 aaagggctat gtcaggtttc aatgctatct gcttctgttc ctgctcactg ttctggattt
                                                                         660
 tgtccttctt catccctage accagaattt cccagtctcc ctccctacct tcccttgttt
                                                                         720
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 tgggctcaac atgata
                                                                         796
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       <211> 488
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       <400> 180
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                                                                         120
 catgeteccg geogecatgg eegeggata geatgttgag eecagacace tgeaggteat
                                                                         180
 ttggagagat ttttcacgtt accagcatga tggtcttttt caggaggaga gacactgagc
                                                                         240
 actcccaagg tgaggttgaa gatttccbct agatagccgg ataagaagac taggagggat
                                                                         300
 gcctagaaaa tgattagcat gcaaatttck acctgccatt tcagaactgt gtgtcagccc
                                                                        360
 acattcagct gcttcttgtg aactgaaaag agaggtat tgagactttt ctgatggccg
                                                                        420
 ctctaacatt gtaacacagt aatctgtgtg tatgtgggtg tgtgtgtgtg tctgggctca
                                                                        480
 acatgcta
                                                                        488
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       <211> 317
       <212> DNA
       <213> Homo sapien
       <400> 181
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                                                                        120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc
                                                                        180
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag gacatgtggc
                                                                        240
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggt tggttggtgt
                                                                        300
ctgggctcaa catgcta
                                                                        317
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      <211> 507
      <212> DNA
      <213> Homo sapien
      <220>
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      <223> n = A, T, C \text{ or } G
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SV

agcagagagc\accacataca ttagaatggt aaggactgcc acctccttca agaacaggag	180
tgagggtggt ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca	240
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttccg aactgctttt	300
tgtgtctggg ctcaacatgc tatcccgcgg ccatggcggc cgggagcatg cgacgtcggg	360
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgtttt acaacgtcgt	420
gactgggaaa accetggcgt tacceaactt aatcgcettg cagcacatce cecttteeca	480
gctggcgtaa tancgaaaag gcccgca	507
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agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg	180
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acaggggtca cettatecag tgeteagtge ttetttgetg etacetggtt tteteteata	360
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aagtggggaa gtttcacaaa gcagcagctt tgttttgtgt attttcacct tcagttagaa	480
gaggaagget gtgagatgaa tgttagttga gtggaaaaga egggtaaget tagtggatag	540
agaccetaac gaatcactag tgcggccgcc ttgcaggtcg accatatggg agagctc	597
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                                                                                 120
        accccagagg cctacagatc ctcctttgat acataagaaa atttccccaa actacctaac
                                                                                180
        tatatcattt tgcaaqattt gttttaccaa attttgatgg cctttctgag cttgtcagtg
                                                                                240
        tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg tgtagctggc
                                                                                300
        aacatcaagt gcagtaaata ttcattaagt tttcacctac taaggtgctt aaacacccta
                                                                                360
        gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggtcctgttc
                                                                                420
        aaggtcaatc atacatgtag tgtgagcagc tagtcactat cgcatgactt ggagggtgat
                                                                                480
        aatagaggcc tcctttgctg taaagaact cttgtcccag cctgtcaaag tggatagaga
                                                                                540
        ccctaacgaa tcactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa
                                                                                597
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              <211> 324
              <212> DNA
              <213> Homo sapien
              <400> 187
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                                                                                 60
ccatatgtag tggttcaaga gactgcagtt cagaaagac tagccgagcc catccatgtc
                                                                                120
        ttccacttaa ccctgctttg ggttacacat ctdaactttt ctgttcaagt ttctctgtgt
Ш
                                                                                180
: <del>}</del>
        agtttatage atgagtattg ggawaatgee etgaacetg acatgagate tgggaaacae
                                                                                240
Ó
        aaacttactc aataagaatt tctcccatat ttttatgatg gaaaaatttc acatgcacag
                                                                                300
Ш
        aggagtggat agagacccta acga
                                                                                324
M
              <210> 188
23
              <211> 178
              <212> DNA
W
              <213> Homo sapien
ij
              <220>
              <221> misc_feature
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       gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacacc
                                                                               120
       attgcccaga aacatgtatt acctaacatg cacatactct taaaactact catcact
                                                                               178
             <210> 189
             <211> 367
             <212> DNA
             <213> Homo sapien
             <400> 189
       tgacaccttg tccagcatct gacacagtct tggctcttgg aaaatattgg ataaatgaaa
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       atgaatttct ttagcaagtg gtataagctg agaatatacg tatcacatat cctcattcta
```

agacacattc agtgtccctg aaattagaat aggacttaca ataagtgtgt tcactttctc

aatagctgtt attcaattga tggtaggcct taaaagtcaa agaaatgaga gggcatgtga

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180

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```
aaaaaagete dakateaetg ateattagaa aaetteeatt caaaceeeca atgagatace
                                                                         300
 atctcatacc agt cagaatg gctattatta aaaagtcaaa aaataacaga tgctggacaa
                                                                         360
 ggtgtca
                                                                         367
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       <211> 369
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       <220>
       <221> misc_feature
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                                                                         120
 aattgtteet geaaggeeta tggatagagt attgteeage actgetetgg aagetaggag
                                                                         180
 catggggatg aacaagatag gctacatcct gttcccacag aacttccact ttagtctggg
                                                                         240
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 aagaaagcag agtcatgatt tanaatgctg gaaacagggg ctattgcttg agatattgaa
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                                                                         369
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       <211> 369
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tctacaaaga acttatacaa atttacaaga aacaaacaaa caaqcaactc ctcaaaaagt
                                                                        180
gggtgaagga tgtgaacaga cacttctcaa aagaagacat ttatggggcc aacaaacata
                                                                        240
tgaaaaaaag ctcatcatca ctggtcacta gataaatgca aatcaaaacc acaatgagat
                                                                        300
accatctcat tccagttaga atggcaatca ttaaaaagtc aggaaacqac agatgctgga
                                                                        360
caaggtgtc
                                                                        369
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caagactggt ctagtgacag tcctccagac attttttcat ttgttccata tacgtggaat
                                                                        120
tttaaaatca tgtttcatca gtttgaaatg atttgggctg ctaatcaaca caattggat
                                                                        180
gactgttcta ctaaacaaca ggaaaatgtg tatctggcag cctgtggaga aacactaaac
                                                                        240
attgattttt ctttgccttt tacggacttt gttccagcta catgtaatac caagttctct
                                                                        300
ttaagaggag aagatgttga tetteatttg tttetaceag aetgeeacee tagtaaatat
                                                                        360
tetttattta tgetggtaaa aaattgeeat eeaaataaga tgatteatga taetggtatt
                                                                        420
cctgctgagt gtcaagtggc caagcgtca
                                                                        49
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                                                                          120
 agetgeaata aataaetggt aattgeagta ateattteag geeaatteaa teeagtttgg
                                                                          180
 ctcagaggtg cctttggctg agagaagagg tgagatataa tgtgttttct tgcaacttct
                                                                          240
 tggaagaata actccacaat agtdtgagga ctagatacaa acctatttgc cattaaagca
                                                                          300
 ccagagtetg ttaattccag tactgataag tgttggagat tagactccag tgtgtcaagt
                                                                          360
 ggccaagcgt ca
                                                                          372
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       <211> 309
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       <220>
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                                                                         120
cagaaacatt cagttetgan cactegaatg geaggataa tttttgtgtt gtaateette
                                                                         180
acatatacaa aaacaaactc tgcantctca cgttacaaaa aaacgtactg ctgtaaaata
                                                                         240
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                                                                         300
caagcgtca
                                                                         309
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      <211> 312
      <212> DNA
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      \langle 223 \rangle n = A,T,C or G
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ggactgcaac tatccccact tcccagatga ggggaccaan gtacacatta ggacccagat
                                                                        120
gggagcacag atttgtccga tcccagactc caagcactca gcgtcactcc aggacag gg
                                                                        180
ctttcagata aggtcacaaa catgaatggc tccgacaacc ggagtcagtc cgtgctgagt
                                                                        240
taaggcaatg gtgacacgga tgcacgtgtn acctgtaatg gttcatcgta agtgtcaag\chi
                                                                        300
ggccaagcgt ca
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312

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       <211>
             288
       <212> DNA
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                                                                         120
agtacatttt acttagtaat aataataaac aaatatatta catttttgtg tatttactac
                                                                         180
accatatttt ttattgttat\tgtagtgtac accttctact tattaaaaga aataggcccg
                                                                         240
aggcgggcag atcacgaggt daggagatgg agaccactac gtcgatac
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                                                                         120
caggagaagc agaatggcaa aacatttcat cakactactc aggatagcat gcagtttaaa
                                                                         180
acctataagt agtttatttt tggaattttc cachtaatat tttcagactg caggtaacta
                                                                         240
aactgtggaa cacaagaaca tagataaggg gaga&cacta cgtcgatac
                                                                         289
      <210> 198
      <211> 288
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agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt
                                                                         120
aaaattcagg ctgtcaaaga gatttgctat gaggttgctc tcaat\u00e9actt caggcacagt
                                                                         180
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agcttt\deltatgc catgtatggc
                                                                         240
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatak
                                                                         288
      <210> 199
      <211> 1027
      <212> DNA
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      <220>
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      <222> (1)...(1027)
      <223> n = A, T, C \text{ or } G
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aancccaggg tttccccatt cagggaggtg taaaaagncg gccaggggat tgtaanagga
                                                                        120
ttcaataata gggggaatgg gcccngaagt tgcaaggttc cngcccgcca tgnccgcggg
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atttagtgac attacgacgs tggtaataaa gtgggsccaa waaatatttg tgatgtgatt
                                                                        240
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SulfA

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<pre><213> Homo sapid</pre>	caccegectg actgeacaca gagaaagage cagetteece gaaacacatt tagtgeagee actgaatact acagtaagaa gaccaaaatg en ure 3) or G cgggetacta	gagatcagaa agaagcctgg acctgtggca gttaggcaat tactatccac ggaagcagct tatggtatca tgtcaagtgg	atgctaccaa aagtcagaag ataaagtcgt tcggcgtgtg tattgctcct ggtgatggta taaacttaca ccaagcgtca	ccaagactgt agaagctaga gcatggctta ttcatcagag acgctgcaaa cttatttgtg gggaccgcca	120 180 240 300 360 420 480

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aaggcagttg tatgagtttt agctgeggea ettegagace tetgageeca eeteetteag
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  caaaccacca ccccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca
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  aataaacnaa aaccaaaaaaa aaaagagaag gggaaatgta tatgtctgtc catcctgttg
                                                                          360
  ctttageetg teageteeta nagggeaggg accgtgtett eegaatggte tgtgeagege
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  cgactgcggg aagtatcgga/ggaggaagca gagtcagcag aagttgaacg gtgggcccgg
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                                                                         420
                                                                         480
 gaageettte etteacceag eggageaact tgattteeta caactteect cateagagee
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                                                                        120
                                                                        180
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aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt
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SulpAI

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                                                                         180
 cctttgacaa cagcctt aa ctaacacaag aaaaggcatg tctgacactc ttcctgagtc
                                                                         240
 tgactctgat acgttgtt t gatgtctaaa gagctccaga acaccaaagg gacaattcag
                                                                         300
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       <211> 281
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       <223> n = A, T, C or G
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 aaattaaatc ttgtcatgac aagtctggaa ttccdgatga ggttttacaa agtattttgg
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 atcaatactc caacaaatca gaaagccaga aagaggatcc tttcaatatt gcagaaccac
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       <213> Homo sapien
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                                                                      1080
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SubAl
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<211> 419

<212> DNA

<213> Homo sapien

<220>

<221> misc feature

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<223> n = A, T, C or G

<400> 228

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     <212> DNA
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     <221> misc_feature
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                                                                       300
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                                                                       360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctatt
                                                                       420
ttctcatcac taatattaga ttaaaccctt tgaagacagc gtctgtggtt tctctacttc
                                                                       480
agettteeet eegtgtettg cacacagtag etgttttaca agggttgaac tgaetgaagt
                                                                       540
gagattattc
                                                                       550
```

```
<210> 236
        <21 > 325
        <212≯ DNA
        <213> Homo sapien
        <400> 23&
 tagactgact catgicccct accagagtag ctagaattaa tagcacaagc ctctacaccc
                                                                           60
 aggaactcac tattgaatac ataaatggaa tttattcagc cttaaaaagt ttggaaggaa
                                                                          120
 attetgacat atgetaaaac atggatgaac ettgaagact ttatgataag taaaagaage
                                                                          180
 cagtcataaa aggaaaaa a ttgcatgatt ccacttatat gaggtaccta gagtagtcaa
                                                                          240
 tttcatagaa acacaaaata gaatggtgtt tgccagggct tttgaggaaa agggaatgac
                                                                          300
 aagttagggg acatgagtca atcta
                                                                          325
       <210> 237
       <211> 373
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc feature
       <222> (1)...(373)
       <223> n = A, T, C \text{ or } G
       <400> 237
tagactgact catgtcccct atctactcaa catttccact tgaagtctga taggcatctc
                                                                          60
agacttatct tgtcccaaag caaactcttt atttctttc atcctagtct ttattcttg
                                                                         120
tgctgtctta cccatctcaa aagagtgcca aaatccacca agttgctgaa acagaaatct
                                                                         180
aagaaatate ettgattett ettttteeca tetaettea ttetaattea ttagtaaata
                                                                         240 -
atctgtttca gaaaaccaaa cacctcatgt tctcactcat aagggggagt tgaacaatga
                                                                         300
gaacacacag acacagggag gggaacatca cacaccacg cccgtcaggg agtangggac
                                                                         360
atgagtcagt cta
                                                                         373
      <210> 238
      <211> 492
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(492)
      <223> n = A, T, C \text{ or } G
      <400> 238
tagactgact catgtcccct ataatgctcc caggcatcag aaagcatctc aaactggagc
                                                                         60
tgacaccatg gcagaggttt caggtaagtc acaaaagggg tcctaaagaa ttdgccctca
                                                                        120
atatcagagt gattagaaga agtggacaga gctacccaag ttaaacatat gcgagataaa
                                                                        180
aaaaatatgg cacttgtgaa cacacactac aggaggaaaa taaggaacat aatagcatat
                                                                        240
tgtgctatta tgatgatgaa gaacctctct anaagaaaac ataaccaaag aaacaagaa
                                                                        300
aattcctgcn aatgtttaat gctatagaag aaattaacaa aaacatatat tcaatgaatt
                                                                        360
cagaaaagtt agcaggtcan aagaaaacaa atcaaagacc agaataatcc cattttagat
                                                                        420
```

492

60

120

180

240

300

360

420

480 482

60

120

180 240

300

360 420

480

519

```
tgtcgagtaa actanaacag aaagaatacc actggaaatt gaattcctac gtangggaca
         tgantcantc ta
               <210> 239
               <211> 482
               <212> DNA
               <213> Homo sapien
               <220>
               <221> misc_feat\ure
               <222> (1) ... (482)
               \langle 223 \rangle n = A,T,C o^{\star}_{\mathbf{r}} G
              <400> 239
        tggaaagtat ttaatgatgg gcaakttgct gtttacttcc tacatatccc atcatcttct
        gtattttttt aaataacttt ttttt gatt tttaaagtaa ccttattctg agaggtaaca
        tggattacat acttctaagc cattaggaga ctctatgtta aaccaaaagg aaatgttact
        agatetteat ttgateaata ggatgtgata ateateatet ttetgeteta atggaaaagt
        actanaaaca tggaaccata atcttagat a aacaacgtta gaatttgcac taattctacg
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat
        ctaccaactt ctggcgataa gggccaccct \text{ccctctgta cttacagtcc catttcatac}
acagtetttg attaaatatt cacatttttt etctacctaa agacettcaa gaccagtacg
T.
              <210> 240
IJ
              <211> 519
::
              <212> DNA
<213> Homo sapien
ليا
ïŲ
              <220>
<221> misc feature
              <222> (1)...(519)
              <223> n = A,T,C or G
              <400> 240
       tgtatcgacg tagtggtete eccatgtgat agtetgaaat atageetcat gggatgagag
       gctgtgcccc agcccgacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga
       aagcettgca gttgagatag aggaagggca ctgtctcctg cctgccctg ggaactgaat
       gtctcggtat aaaacccgat tgtacatttg ttcaattctg agataggaga aaaaccaccc
       tatggcggga ggcgagacat gttggcagca atgctgcctt gttatgcatt actccacaga
       tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc
       tttgaactta attatgacac agattccttt gctcacatgt ttttttgcta accttctcct
       tattatcacc ctgctctcct accgcattcc ttgtgctgag ataatgaaaa\taatatcaat
```

```
<210> 241
<211> 771
<212> DNA
```

<213> Homo sapien

aaaaacttga nggaactcgg agaccactac gtcgataca

<220>

```
End A
```

```
<221> misc_feature
              (1)...(771)
        <223> \dot{n} = A,T,C \text{ or } G
       <400> 241
 tgtatcgacg tagtggtete cactecegee ttgacgggge tgetatetge ettecaggee
                                                                          60
 actgtcacgg ctcccgggta gaagtcactt atgagacaca ccagtgtggc cttgttggct
                                                                         120
 tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct
                                                                         180
 aggacggtca gcttggtcdc tccgccaaac acgagagtgc tgctgcttgt atatgagctg
                                                                         240
 cagtaataat cagcetegt\lambda etcageetgg ageecagaga tggteaggga ggeegtgttg
                                                                         300
 ccanacttgg agccagagaa \gcgattagaa acccctgagg gccgattacc gacctcataa
                                                                         360
 atcatgaatt tgggggcttt gcctgggtgc tgttggtacc angagacatt attataacca
                                                                         420
 ccaacgtcac tgctggttcc a/tgcaggga aaatggttga tcnaactgtc caagaaaacc
                                                                         480
 actacgtcca taccaatcca ctaattgccn gccgcctgca ggttcaacca tattggggaa
                                                                         540
 naactccccn ccgccgtttg ggatgncat naacctttga aattttttcc tattanttgt
                                                                         600
 ccccctaaaa taaaccnttg ggcnttaatc cattgggtcc atancttntt tncccggttt
                                                                         660
 ttaaaanttg tttatcccgc cnccchattt ccccccaac tttccaaaac ccgaaaccnt
                                                                         720
 tnaaatttnt tnaaaccctg gggggttccc nnaattnnan ttnaanctnc c
                                                                         771
       <210> 242
       <211> 167
       <212> DNA
       <213> Homo sapien
       <400> 242
 tgggcacett caatateggg eteategata acateaeget getgatgetg etgttgetgg
                                                                         60
 teetetetag gaacetetgg atttteaaat tethtgagga atteateeaa attatetgee
                                                                        120
 totoctoott tootootttt totaaggtot totggtacaa goggtoa
                                                                        167
       <210> 243
       <211> 338
       <212> DNA
       <213> Homo sapien
      <400> 243
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc
                                                                         60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg
                                                                        120
atattettga caaagetage atagagacag caattttaca caaggtattt tteacetgtt
                                                                        180
taataacagt ggttttccta cacccatagg gtgccaccaa gggaggagtg cacagttgca
                                                                        240
gaaacaaatt aagatactga agacaacact acttaccatt teeegtatag ctaaccacca
                                                                        300
gttcaactgt acatgtatgt tcttatgggc aatcaaga
                                                                        338
      <210> 244
      <211> 346
      <212> DNA
      <213> Homo sapien
      <400> 244
tttttggctc ccatacagca cactctcatg ggaaatgtct gttctaaggt caadccataa
                                                                        60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaat
                                                                       120
cactgataca attgatccaa taccagtttt agtctggcat tgaatcaaat cactg
                                                                        180
```

```
gttgtataaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat
                                                                         240
 gcttatcttt acatgctaaa atcatgatct gtacattggt gcagtgaata ttactgtaaa
                                                                         300
 agggaagaag gaatgaagac gagctaagga tattgaaggt gcccaa
                                                                         346
       <210> 245
       <211> 521
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(521)
       <223> n = A, T, C or
       <400> 245
accaatecea caeggataet gagggacaag tatateatee cattteatee etacageage
                                                                          60
aacttcatga ggcaggagtt attagtdcca ttttacagaa gaggaaactg agacttaggg
                                                                         120
agatcaagta atttgcccag gtcgcacaat tagtgataga gccagggctt gaagcgacgt
                                                                         180
ctgtcttaag ccaatgaccc ctgcagat da ttagagcaac tgttctccac aacagtgtaa
                                                                         240
geotettget anaageteag gteeacaagrac{\lambda}{2} geagagattt ttgtetgttt tgeteattge
                                                                         300
teetteecea ttgettagag cagggtetge\caegaaneag gtteteaatg catagttatt
                                                                        360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat
                                                                         420
gaatcacctg tganatgggt atgcttgttc ccantgttg cagatnaaga tattgaangt
                                                                        480
gcccaaatca ctanttgcgg gcgcctgcan gtcancata t
                                                                        521
      <210> 246
      <211> 482
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(482)
      <223> n = A, T, C or G
      <400> 246
tggaaccaat ccaaataccc atcaatgata gactggataa agaaatttg gcacatgttc
                                                                         60
accatgaaat actatgcagc cataaaaaag gatgagttca tatecttgc agggacatgg
                                                                        120
atgaagetgg agaceateat teteageaaa etaacaaggg aacagaaac caaacaetge
                                                                        180
atgttctcac tcttaagtgg gagctgaaca atgagaacac atggadacag ggaggggaac
                                                                        240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa
                                                                        300
tacctaatgt agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta
                                                                        360
tgtaacaaac ctgcatgttc tgcacatgta ccccagaact taaagtgtta ataaaaaaat
                                                                        420
taagaaaaaa gttaagtatg tcatagatac ataaaatatt gtanatatt aaggtgccca
                                                                       480
aa
                                                                       482
      <210> 247
      <211> 474
      <212> DNA
      <213> Homo sapien
```

```
<2\20>
               <221> misc_feature
               <222>√(1)...(474)
               <223> h = A,T,C or G
               <400> 24カ
        ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt
                                                                                 60
        aagtgagaga ggggcagaga agacaagggc atatgcaggg ggtgattata acaggtggtt
                                                                                 120
        gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta
                                                                                 180
        agatcagtga attgtacttc tccagaattt gatttctggn ggagtcaaat aactatccag
                                                                                 240
        tttggggtat catanggca cagttgaggt ataggaggta gaagtcncag tgggataatt
                                                                                 300
        gaggttatga anggtttggt\actgactggt actgacaang tctgggttat gaccatggga
                                                                                360
        atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact
                                                                                420
        aaaaannnaa gnnnnngggg aatattattt atgtggatat tgaangtgcc caaa
                                                                                474
              <210> 248
              <211> 355
              <212> DNA
              <213> Homo sapien
1 20
              <220>
JUL
              <221> misc_feature
              <222> (1)...(355)
              \langle 223 \rangle n = A,T,C or G
T.
M
              <400> 248
        ttcgatacag gcaaacatga actgcaggag ggtqgtgacg atcatgatgt tgccgatggt
H
                                                                                 60
ccggatggnc acgaagacgc actggancac gtg\phittacgt ccttttgctc tgttyatggc
                                                                                120
        cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg
Ш
                                                                                180
       attgantece antgacacca gagacaccce aacca cagn atatcantat attgatgtag
il
                                                                                240
       ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat
Ш
                                                                                300
       ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa
355
<210> 249
             <211> 434
             <212> DNA
             <213> Homo sapien
             <400> 249
       ttggattggt cctccaggag aacaagggga aaaaggtgac cgaqggctcc ctggaactca
                                                                                60
       aggateteca ggageaaaag gggatggggg aatteetggt cetgete cettaggtee
                                                                               120
       acctggteet ecaggettae caggteetea aggeecaaag ggtaacaag getetaetgg
                                                                               180
       accegetgge cagaaaggtg acagtggtet tecagggeet cetgggcete caggtecace
                                                                               240
       tggtgaagtc attcagcctt taccaatctt gtcctccaaa aaaacgagaa gacatactga
                                                                               300
       aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat
                                                                               360
       atttggttcc ctcaattccc tgaaacaaga catcgagcat atgaaatt\psic caatgggtac
                                                                               420
       tcagaccaat ccaa
                                                                               434
```

<210> 250 <211> 430 <212> DNA

```
<213 Homo sapien
        <220>
       <221> misc feature
       <222> (1) . . . (430)
       \langle 223 \rangle n \neq A,T,C or G
       <400> 250
 tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc
                                                                           60
 tcactagtta ttatta\psitta ttttattttt gagatgaagt ctcgctttgt ctcccaggct
                                                                          120
 ggagageggt ggtgegatet tggetetetg caaceceege etcaageaat teteetgtet
                                                                          180
 tagectegeg ggtagatgqa attacaggeg eccaeegeea tgeecaacta attttttgt
                                                                          240
 gtetteagta gagacagggt ttegecatgt tgggeagget ggtettgaae teetgaeete
                                                                          300
 nagtgatctg ccctcctcgg/cctcacaaag tgctggaatt acaggcatgg gctgctgcac
                                                                          360
 ccagtcaact teteactagt tatggeetta teatttteae caeattetat tggeecaaaa
                                                                          420
 aaaaaaaan
                                                                          430
       <210> 251
       <211> 329
       <212> DNA
       <213> Homo sapien
       <400> 251
 tggtactcca ccatyatggg gtcaaccg\delta_{\!m{C}} atcctcgccc tectcctggc tgttctccaa
                                                                          60
ggagtctgtg ccgaggtgca gctgrtgca\phi tctggagcag aggtgaaaaa gtccggggag
                                                                         120
tototgaaga totootgtaa gggttotgga \tacacottta agatotaotg gatogootgg
                                                                         180
gtgcgccagt tgcccgggaa aggcctggag tgatggggc tcatctttcc tgatgactct
                                                                         240
gataccagat acagecegte ettecaagge caggteacea teteagtega taagteeate
                                                                         300
agcaccgcct atctgcagtg gagtaccaa
                                                                         329
       <210> 252
       <211> 536
      <212> DNA
      <213> Homo sapien
      <400> 252
tggtactcca ctcagcccaa ccttaattaa gaattaagag \quad ggaacctatt actattctcc
                                                                          60
caggeteete tgetetaace aggettetgg gacagtatta gaaaaggatg teteaacaag
                                                                         120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa taqcataaat cagaccaaac
                                                                         180
ttaatggtcg ttgagacttg tgtcctggag cagctgggat aggaaactt ttgggcagca
                                                                         240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaat tacaagggga acccacaca
                                                                         300
ggcccccttc ccagctctca gcctagagta ttagcatttc tcagatagag actcacaact
                                                                         360
tccttgctta gaatgtgcca ccggggggag tccctgtggg tgatgaggct ctcaagagtg
                                                                         420
agagtggcat cctatcttct gtgtgcccac aggagcctgg cccgagactt agcaggtgaa
                                                                         480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctggtggag taccaa
                                                                         536
      <210> 253
      <211> 507
      <212> DNA
      <213> Homo sapien
```

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The state of the s
```

```
<220
       <221 misc_feature
       <222>√(1)...(507)
       <223> n = A, T, C \text{ or } G
       <400> 25,3
 ntgttgcgat cccagtaact cgggaagctg aggcgggagg atcacctgag ctcaggaggt
                                                                       60
 tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac
                                                                       120
 cctccaagac agaaaaggaaa agaaaaggaaa agggaaaaagg aaaaggaaaa
                                                                       180
 ggaaaaggaa aaggaaaaa caagacttga atttggatct cctgacttca
                                                                      240
 attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaaccc
                                                                      300
 ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca
                                                                      360
 aatttgaata ttatatgcda ggtgtttttc attcctgctc tcacttaatt ctcaccactc
                                                                      420
 tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg
                                                                      480
 gagaccgagg tgggcggats\gcaacaa
                                                                      507
       <210> 254
       <211> 222
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(222)
      <223> n = A, T, C or G
      <400> 254
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt
                                                                       60
actggccaca ctttctcctg ccgccttcct caaqgctgaa gacacacaga gcaaggcgct
                                                                      120
tetgttttae tecceaatgg taactecaaa ceatagatgg ttagetneee tgeteatett
                                                                      180
tecacatece tgetatteag tatagteegt ggaceqatee aa
                                                                      222
      <210> 255
      <211> 463
      <212> DNA
      <213> Homo sapien
      <400> 255
tgttgcgatc cataaatgct gaaatggaaa taaacaacat galggaggag gattaagttg
                                                                      60
gggagggagc acattaaggt ggccatgaag tttgttggaa gaagtgactt ttgaacaagg
                                                                     120
ccttggtgtt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg
                                                                     180
agatgggaga gggcttggaa ggtgtgcgaa ataggaagga gtttgttctg gtatgagtct
                                                                     240
agtgaacaca gaggcgagag gccctggtgg gtgcagctgg agagttatgc agaataacat
                                                                     300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggat tttattctaa
                                                                     360
gagtgatggg aagccgtgga aagggggtta agcaaggagt gaaattat\c ka gatttacagt
                                                                     420
463
      <210> 256
      <211> 262
     <212> DNA
     <213> Homo sapien
```

```
<400> 256
  ttggattggt caacetgete aactetacyt tteeteette tteetaaaaa attaatgaat
                                                                            60
  ccaatacatt attgccaaaa cccttgggtt ttatcaatat ttctgttaaa aagtattatc
                                                                           120
  cagaactgga dataatacta cataataata cataacaacc ccttcatctg gatgcaaaca
                                                                           180
 tctattaata tagcttaaga tcactttcac tttacagaag caacatcctg ttgatgttat
                                                                           240
  tttgatgttt ggaccaatcc aa
                                                                           262
        <210> 257
        <211> 461
        <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1) ... (46½)
       \langle 223 \rangle n = A,T,C \Deltar G
       <400> 257
 gnggnnnnnn nnncaattcg act ngttcc cntggtancc ggtcgacatg gccgcgggat
                                                                           60
 taccgettgt nnctgggggt gtat ggggga ctatgaccge ttgtagetgg gggtgtatgg
 gggactatga ccgcttgtag mtggkggtgt atgggggact atgaccgctt gtcgggtggt
                                                                          120
                                                                          180
 cggataaacc gacgcaaggg acgtgam{t}cga agctgcgttc ccgctctttc gcatcggtag
                                                                          240
ggatcatgga cagcaatatc cgcattcgyc tgaaggcgtt cgaccatcgc gtgctcgatc
                                                                          300
aggegaeegg egacategee gacacege&c geegtaeegg egegeteate egeggteega
                                                                          360
tecegettee caegegeate gagaagtteà eggteaaceg tggeeegeae gtegacaaga
                                                                          420
agtegegega geagttegag gtgegtacet \acaageggte a
                                                                          461
      <210> 258
       <211> 332
       <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(332)
      <223> n = A,T,C or G
      <400> 258
tgaccgettg tagetggggg tgtatggggg actacgaccg ct/gtagetg ggggtgtatg
                                                                          60
ggggactatg accgettgta getgggggtg tatgggggae tat\dot{g}accget tgtagetggg
                                                                         120
ggtgtatggg ggactaggac cgcttgtagc tgggggtgta tgggggacta tgaccgcttg
                                                                         180
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggttstatg ggggactatg
accgcttgta nctgggggtg tatgggggac tatgaccgct tgtgctgcct gggggatggg
                                                                         240
                                                                        300
aggagagttg tggttgggga aaaaaaaaaa aa
                                                                        332
      <210> 259
      <211> 291
     <212> DNA
     <213> Homo sapien
```

```
<2⁄20>
       <221> misc_feature
       <222爻 (1)...(291)
       <223> \chi = A, T, C \text{ or } G
       <400> 253
 taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt
                                                                        60
 gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt
                                                                       120
 gaccgcttgt gaccgcttgt nacngggggt gtctggggga ctatgannga ntgtnactgg
                                                                       180
 gggtgtctgg gggnctatga nngantgtna cngggggtgt ctgggggact atganngact
                                                                       240
 gtgcnncctg ggggatcnga ggagantngn ggntagngat ggttngggan a
                                                                       291
       <210> 260
       <211> 238
       <212> DNA
       <213> Homo sapien
       <400> 260
 taagagggta ctggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac
                                                                        60
tttgaggtca gggatgaaaa ctagaattttt tttcttttt tttgcctgag aaacttgctg
                                                                       120
ctctgaagag gcccatgtat taattg\phittt gatcttcctt ttcttacagc cctttcaagg
                                                                       180
gcagageeet eettateetg aaggaat\phitt ateettaget atagtatgta eeetetta
                                                                       238
      <210> 261
      <211> 746
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(746)
      <223> n = A, T, C or G
      <400> 261
ttgggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac
                                                                       60
tgttctaagc ctttaaacgt actaattcat ttaatgctca taatcacttt agaaggtggg
                                                                      120
tactagtatt agtctcattt acagatgcaa catgcaggca 
ablaagaggtt aattaacttg
                                                                      180
cccaaggtaa cacagctaag aaatagaaaa aatattgaat &tggaaagtt gggcttctgg
                                                                      240
gtaacccaca gagtcttcaa tgagcctggg gcctcactca gttgctttt acaaagcgaa
                                                                      300
tgagtaacat cacttaattc agtgagtagg ccaaatggag gtcaggctacg agtttctgct
                                                                      360
gttcttgcag tggactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta
                                                                      420
tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta
                                                                      480
tgtttaggat gacttttggc tggtcctagg gcaagctctg tctgscacgg aacacagaat
                                                                      540
wacacaggga ccccctcaat ttctggtgtg gctagaacca tgaacca ttggggggaa
                                                                      600
caagcggtca aaacctaagt gcggccggct ggcagggtcc acccatatqg ggaaaactcc
                                                                      660
cnacgcgttt ggaatgcctn agctngaatt attctaanag ttgtccncnt aaaattagcc
                                                                      720
tgggcgttaa tcangggtcn naagcc
                                                                      746
     <210> 262
     <211> 588
     <212> DNA
```

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<21/3> Homo sapien
       <220
       <221>\misc_feature
       <222>\(1)...(588)
       <223> \vec{n} = A, T, C \text{ or } G
       <400> 262
 tgaccgcttg tcatatcaca tggggtcctg cacgcttttg cctttgtagg aaacctgaca
                                                                           60
 tttgtctgtt tcttcttcttccttc ccatatcctc ctaatttacg tttgacttgt
                                                                         120
 ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct
                                                                         180
 tcaagtcccg cccactcatc actgcttctc accttcccct gaccaggctt acaagtgggt
                                                                         240
 tettgeetge ttteeetttg gacceaacaa geecetgtaa tgagtgtgea tgactetgae
                                                                         300
 agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg
                                                                         360
 caaattgtta aaataacca\phi atttcttaga ttccagtacc caaatcatgt ctttacgaac
                                                                         420
 tgctcctcac acccagaagt \ggcacaataa ttcttgggga attattactt tttttttct
                                                                         480
 ctctnttnnc gnnngnnnng anngnccag gaattaccac nttggaagac ctggccngaa
                                                                         540
 tttattatan aggggagccg attntttttc ctaacacaaa gcgggtca
                                                                         588
       <210> 263
      <211> 730
       <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(730)
      <223> n = A, T, C \text{ or } G
      <400> 263
ttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta
                                                                         60
agactgcaaa aagattaaat gtaaaagttg tct/gtatac agtaatgttt aagataccta
                                                                         120
ttanatttat aaatggaaaa ttagggcatt tggataca agttgaaaat tcaggagtga
                                                                         180
ggttgggctg gctgggtata tactgaaaac tgtcaqtaca cagatgacat ctaaaaccac
                                                                         240
aaatctggtt ttattttagc agtgatatgt gtcacttcca caaaagcctt cccaattggc
                                                                        300
ctcagcatac acaacaagtc acctccccac agccctctac acataaacaa attccttagt
                                                                        360
ttagttcagg aggaaatgcg cccttttcct tccgctctag gtgaccgcaa ggcccagttc
                                                                        420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa
                                                                        480
tgggagtgac cacaaaggaa agccaaggan aaactttgglambda gaccgtttct aganccctgg
                                                                        540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt
                                                                        600
ggannagact ttctgaactg ggcgctgaac ataancetca ttgaatgtet tcacagtete
                                                                        660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc
                                                                        720
gccctttqnc
                                                                        730
      <210> 264
      <211> 715
      <212> DNA
      <213> Homo sapien
     <220>
     <221> misc_feature
```

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```
(1)...(715)
        \langle 223 \rangle n = A,T,C \text{ or } G
        <400> 264
  ttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt
                                                                         60
 tacacttaat gtggt tatag atgctgttga gcttacttct accaccttgc tatttctccc
                                                                       120
 gtctcttttt tgttcctttt ctcttctttt cctcccttat tttataattg aatttttag
                                                                       180
 gattctattt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc
                                                                       240
 ttctgtcatt tcaatgtgca tcttaaactc atcacaatct attttcaaat aatatcatat
                                                                       300
 aaccttacat ataatgtaag aatctaccac catatatttc catttctccc ttccatccta
                                                                       360
 tgtntgtcat attttttcct\ttatatatgt tttaaagaca taatagtata tgggaggttt
                                                                       420
 ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg
                                                                       480
 tttattctca aatnnaccta atatttccta ccatntctna tacntttcaa gaatctgaag
                                                                       540
 gcattggttt tttccggctt aagaacctcc tctaaagcac tctaagcaga attaagtctt
                                                                       600
 ctgggagagg aatteteeca agettgggee ttnanntgta eteentnang gttaaanttt
                                                                       660
 ggccgggaaa tagaaattcc aagt aacag gntanttttt ntttttnttn tenec
                                                                       715
       <210> 265
       <211> 152
       <212> DNA
       <213> Homo sapien
       <400> 265
 ttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt
                                                                       60
 tgattcccat gaagaggtta tgatttctaa agaaacatg gctactatac tatcaatcag
                                                                       120
 ggttaaatct tttttttttg agacggagtt ta
                                                                       152
      <210> 266
       <211> 193
       <212> DNA
       <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(193)
      <223> n = A, T, C \text{ or } G
      <400> 266
taaactccgt ccccttctta atcaatatgg aggctaccca ctccacatta ccttctttc
                                                                       60
aagggactgt ttccgtaact gttgtgggta ttcacgacca ggcttctaaaa cctcttaaaa
                                                                      120
180
gagacggagt tta
                                                                      193
      <210> 267
      <211> 460
      <212> DNA
      <213> Homo sapien
      <400> 267
tgttgcgatc ccttaagcat gggtgctatt aaaaaaatgg tggagaagaa aatacctgga
                                                                      60
atttacgtct tatctttaga gattgggaag accctgatgg aggacgtgga gaacagcttc
                                                                      120
```

```
ttottgaatg kcaattooca agtaacaaca gtgtgtcagg cacttgctaa ggatootaaa
                                                                         180
 ttgcagcaag gatacaatgc tatgggattc tcccagggag gccaatttct gagggcagtg
                                                                         240
 gctcagagat gcccttcacc tcccatgatc aatctgatct cggttggggg acaacatcaa
                                                                         300
 ggtgtttttg gackccctcg atgcccagga gagagetete acatetgtga etteateega
                                                                         360
 aaaacactga atgctggggc gtactccaaa gttgttcagg aacgcctcgt gcaagccgaa
                                                                         420
 tactggcatg acccataaaa ggaggatgtg gatcgcaaca
                                                                         460
       <210> 268
       <211> 533
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(533)
       <223> n = A, T, C \text{ or } G
       <400> 268
 tgttgcgatc cgttgataga atagcgadqt ggtaatgagt gcatggcacg cctccgactt
                                                                         60
 accttcgccc gtggggaccc cgagtacgt/c tacggcgtcg tcacttagag taccctctgg
                                                                        120
 acgcccgggc gcgttcgatt taccggaagc\gcgagctgca gtgggcttgc gcccccggcc
                                                                        180
aaattetttg gggggtttaa ggccgcgggg atttgaggt atetetatea gtatgtagee
                                                                        240
aagttggaac agtcgccatt cccgaaatcg cttctttga atccgcaccg cctccagcat
                                                                        300
tgcctcattc atcaacctga aggcacgcat aagtgacggt tgtgtcttca gcagctccac
                                                                        360
tccataacta gcgcgctcga cctcgtcttc gtacgcgcca ggtccgtgcg tgcgaattcc
                                                                        420
caactccggt gagttgcgca tttcaagttn cgaaactgtt cgcctccacn atttggcatg
                                                                        480 -
ttcacgcatg acacggaata aactcgtcca gtaccgggaa tgggatcgca aca
                                                                        533
      <210> 269
      <211> 50
      <212> DNA
      <213> Homo sapien
      <400> 269
ttttttttt ttcgcctgaa ttagctacag atcctcctca caagcggtca
                                                                         50
      <210> 270
      <211> 519
      <212> DNA
      <213> Homo sapien
      <400> 270
tgttgcgatc caaataaccc accagcttct tgcacacttc gcagaagcca ccgtcctttg
                                                                         60
gctgagtcac gtgaacggtc agtgcaagca gccgcgtgcc agagcagagg tgcagcagtgc
                                                                        120
tgcacaccag ctcagggctg acctcctcca gcaggatgga caggatggag ctgccgtacg
                                                                        180
tgtccaccac ctcctggcac tcttccgaca gggacttcgg cagcttcgag cacattttgt
                                                                        240
caaaagcgtc gagtatttct ttctcagtct tgttgttgtc aatcagcttg gtcacctcc
                                                                       300
tcaccaggaa ttcacacacc tcacagtaaa catcagactt tgctgggacc tcgtgcttct
                                                                       360
taatgggctc caccagttcc agggcaggga tgacattctt ggaggccact ttggcgggga
                                                                       420
ccagagtetg catgggcate tettteacet cateacagaa eccaaceage geacagatet
                                                                       480
ccttgggttg catgtgcatc atcatctggg atcgcaaca
                                                                       519
```

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had been done done done and the second secon
```

```
<210> 271
       <211>\457
       <212> NA
       <213> Homo sapien
       <400> 271
 ttttttttt ttcgggdggc gaccggacgt gcactcctcc agtagcggct gcacgtcgtg
                                                                          60
 ccaatggccc gctatgagga ggtgagcgtg tccggcttcg aggagttcca ccgggccgtg
                                                                         120
 gaacagcaca atggcaagac cattttcgcc tactttacgg gttctaagga cgccgggggg
                                                                         180
 aaaagctggt gccccgactg cgtgcaggct gaaccagtcg tacgagaggg gctgaagcac
                                                                         240
 attagtgaag gatgtgtgtt katctactgc caagtaggag aagagcctta ttggaaagat
                                                                         300
 ccaaataatg acttcagaaa aaacttgaaa gtaacagcag tgcctacact acttaagtat
                                                                        360
 ggaacacctc aaaaactggt agaatctgag tgtcttcagg ccaacctggt ggaaatgttg
                                                                        420
 ttctctgaag attaagattt taggatggca atcaaga
                                                                        457
       <210> 272
       <211> 102
       <212> DNA
       <213> Homo sapien
       <400> 272
ttttttttt ttgggcaaca acctgaatac cttttcaagg ctctggcttg ggctcaagcc
                                                                         60
cgcaggggaa atgcaactgg ccaggtcaca gggcaatcaa ga
                                                                        102
      <210> 273
      <211> 455
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(455)
      <223> n = A, T, C or G
      <400> 273
ttttttttt ttggcaatca acaggtttaa gtcttcggcc gaagttaat\lambdatcgtgttttt
                                                                         60
ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag
                                                                        120
gtttaagtet teggeegaag ttaatetegt gtttttggea ateaacaggt ttaagtette
                                                                       180
ggccgaagtt aatctcgtgt ttttggcaat caacaggttt aagtcttcgg ccgaagttaa
                                                                       240
tctcgtgttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt
                                                                       300
ggcaatcaag aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaag
                                                                       360
gtttaagtet teggeegaan ttaatetegt gtttttggea ateaacaggt ttaantdete
                                                                       420
ggccgaagtt aatctcgtgt ttttggcaat caana
                                                                       455
      <210> 274
      <211> 461
      <212> DNA
      <213> Homo sapien
      <400> 274
```

```
60
 tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca
                                                                      120
 tccctgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa
                                                                      180
 acagaaccaa agadaaaac cacatgatta teteaataga tgeagaaaag geettggaca
                                                                      240
 aattcaacag ccctbcatgc taaacactct taataaacta gatattgatg gaatgtatct
                                                                      300
 caaaataata agagctatt atgacaaacc cacagccaat atcatactga atgggcaaag
                                                                      360
 actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct
                                                                      420
 attcaacata gtattggaag ttctggccag ggcaatcaag a
                                                                      461
       <210> 275
       <211> 729
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
      <222> (1)...(729)
      <223> n = A, T, C \text{ or } G
      <400> 275
tttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac
                                                                      60
catgaaaaca taggaaggtg gctgttacag caaa atttc agatagacga atcggccaag
                                                                     120
ctccccaaac cccaccttca cagcctcttc cacacottcc ccanagattg ttgtccttca
                                                                     180
cttgcaaatt canggatgtt ggaagtngac atttnnagtn gcnggaaccc catcagtgaa
                                                                     240
ncantaagca gaantacgat gactttgana nacanct at gaagaacacn ctacnganaa
                                                                     300
ccetttetnt egtgttanga tetenngtee nteactaatg eggeeeetg enggteeace
                                                                     360
atttgggaga actccccccn cgttggatcc ccccttgagt ntcccattct ngtcccccan
                                                                     420
accongnitte ngngnicantn concetenca contittee tigningthaa aatningtitt
                                                                     480
neegeeneee naatteeeae eenaateaea gegaaneeng aaggeetten naagtgttta
                                                                     540.
angecengng gttteetent ntanttgeag ectaceetee enattnnnnt tnegngttgg
                                                                     600
tegegeeetg gnenegeetn gtteetettt nnggnnacaa eethqntenn nggenenten
                                                                     660
nnnetnttee tnnnactage tngcetntee nencegnggn neanngcaea ttnenennae
                                                                     720
tntgtnncc
                                                                     729
      <210> 276
      <211> 339
      <212> DNA
      <213> Homo sapien
      <400> 276
tgacctgaca tgtagtagat acttaataaa tatttgtgga atgaatggat gaagt
                                                                      60
tacagagaaa aatagaaaag tacaaattgt tgtcagtgtt ttgaaggaaa attatgatct
                                                                     120
ttcccaaagt tctgacttca ttctaagaca gggttagtat ctccatacat aattttagtt
                                                                     180
gcttttgaaa atcaaatgag ataatctatt tagattgata atttatttag actggctata
                                                                     240
aactattaag tgctagcaaa tatacatttt aatctcattt tccacctctt gtgatatag
                                                                     300
tatgtaggtg ttgactttaa tggatgtcag gtcaatccc
                                                                     339
     <210> 277
     <211> 664
     <212> DNA
     <213> Homo sapien
```

```
<22\1> misc_feature
             (1)...(664)
        \langle 223 \rangle n = A,T,C or G
        <400> 2₹7
 tgacctgaca tccataacaa aatctttctc cattatattc ttctagggga atttcttgaa
                                                                          60
 aagcatccaa aggaaacaaa tgatggtaag accgtgccaa gtggggagca gacaccaaag
                                                                         120
 taagaccaca gatttaacat tcaacaggta gctcacagta ctttgcccga cactgtgggc
                                                                         180
 agaaatagee teetaabgta ageeetgget cagtattgee atecaaatge geeatgetga
                                                                         240
 aagagggttt tgcatcctgg tcagatnaag aagcaatggt gtgctgagga aatcccatac
                                                                         300
 gaataagtga gcattcaga cttgagctag caggaggagg actaagatga tgtgtgagca
                                                                         360
 actctttgta atggctttca/tctaaaataa catggtacgt gccaccagtt tcacgagcaa
                                                                         420
 gtacagtgca aacgcgaact ctgcagaca atccaataac agatactcta attttagctg
                                                                         480
 cctttagggt cttgattaaa taaaatat tagatggatc gcaagttgta aggntgctaa
                                                                         540
 aagatgatta gtactteteg acttgtatgt ecaggeatgt tgttttaaan tetgeettag
                                                                         600
 nccctgctta ggggaatttt taaaqaagat ggctctccat gttcanggtc aatcacnaat
                                                                         660
                                                                         664
       <210> 278
       <211> 452
       <212> DNA
       <213> Homo sapien
       <220>
       <221> misc_feature
       <222> (1)...(452)
       <223> n = A, T, C or G
       <400> 278
tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt
                                                                         60
gacacagagt gggcctctga taattcatga aatgcattct 🗷 aagtcatcc agaatggagg
                                                                        120
ctgcaatctg ctgtgctttg ggggttgcct cactgtgctc chggatatca cacaaaagct
                                                                        180
gcaatcette ttetteaaet aacattttge agtatttget gggattttta etgeagaeat
                                                                        240
gatacatage ccatagtgee cagagetgaa cetetggttg agagagttg ccaaggageg
                                                                        300
ggaaaaatgt cttgaaagat ctataggtca ccaatgctgt catctbacaa cttgaacttg
                                                                        360
gccaattctg tatggttgca tgcagatctt ggagaagagt acgcctctgg aagtcacggg
                                                                        420
atatccaaan ctgtctgtca gatgtcaggt ca
                                                                        452
      <210> 279
      <211> 274
      <212> DNA
      <213> Homo sapien
      <400> 279
ttttttttt ttcggcaagg caaatttact tctgcaaaag ggtgctgctt gcacttt gg
                                                                         60
ccactgcgag agcacaccaa acaaagtagg gaaggggttt ttatccctaa cgcggttatt
                                                                        120
ccctggttct gtgtcgtgtc cccattggct ggagtcagac tgcacaatct acactgacc
                                                                        180
aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt
                                                                        240
tacggtacaa gacgtgtttg ggcatgtcag gtca
                                                                       274
```

```
<2140> 280
               <211 > 272
               <212 DNA
               <213>\Homo sapien
              <400> 280
        tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggt
                                                                                 60
        gaaaatgaat gaac agcaa tgcgtgtatc aacatgaata aatccccaaa acataataat
                                                                                120
        gttgaatgga aaaggtgagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa
                                                                                180
        acctttaaaa aactacatta tttatggtca taagtccatc cagaaaatat ttaaaaaacct
                                                                                240
        acatgggatt gataactact gatgtcaggt ca
                                                                                272
              <210> 281
              <211> 431
              <212> DNA
              <213> Homo sapien
              <220>
              <221> misc_feature
E.
              <222> (1)...(431)
<223> n = A, T, C \text{ or } G
I I
              <400> 281
IJ
        ttttttttt ttggccaata gcatgattta acattggaa aaagtcaaat gagcaatgcg
                                                                                 60
        aatttttatg ttctcttgaa taatcaaaag agtaggcaac attggttcct cattcttgaa
M
                                                                                120
        tagcattaat cagaaaatat tgcatagcct ctagcctcct tagagtaggt gtgctctctc
ží
                                                                                180
       aaatatatca tagtcccaca gtttatttca tgtatttt ctgcctgaat cacatagaca
240 ...
       tttgaatttg caacgcctga tgtaaatata taaattctta ccaatcagaa acatagcaag
300 .
       aaattcaggg acttggtcat yatcagggta tgacag ana tccctgtara aacactgata
IL
                                                                                360
       cacactcaca cacgtatgca acgtggagat gtcgcyttww kkktwywcwm rmrycrwcgn
إيا
                                                                                420
        aatcacttan n
431
              <210> 282
              <211> 98
             <212> DNA
             <213> Homo sapien
             <400> 282
       attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccattg cacttcaggc
                                                                                60
       tggacaacag agcgagtccc tgtgccaaaa aaaaaaaa
                                                                                98
             <210> 283
             <211> 764
             <212> DNA
             <213> Homo sapien
             <220>
             <221> misc feature
             <222> (1)...(764)
```

<223> n = A, T, C or G

```
283
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2040
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Subfil
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180
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 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
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 Ala Leu Ike Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
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 Leu Leu Glu Ris Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
                     230
                                         235
 Thr Thr Leu His \Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                                     250
 Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 Leu Thr Pro Leu Leu Lèu Gly Val His Glu Gln Lys Gln Gln Val Val
                             280
 Lys Phe Leu Ile Lys Lys Ays Ala Asn Leu Asn Ala Leu Asp Arg Tyr
                                             300
 Gly Arg Thr Ala Leu Ile Leu\Ala Val Cys Cys Gly Ser Ala Ser Ile
                     310
 Val Ser Leu Leu Glu Gln Ask Ile Asp Val Ser Ser Gln Asp Leu
                 325
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Val
                                 343
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Clu Lys Gln Met Leu Lys Ile
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His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
                                105
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
                            120
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
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Sulpai

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145
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 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
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 Leu His Lêų Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
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 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
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                     23Q
                                         235
 Thr Thr Leu His Tyr Ala le Tyr Asn Glu Asp Lys Leu Met Ala Lys
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 Ala Leu Leu Tyr Gly Alà Asp Ile Glu Ser Lys Asn Lys His Gly
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 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
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 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
                         295
 Gly Arg Thr Ala Leu Ile Leu Ala Val\Cys Cys Gly Ser Ala Ser Ile
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 Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
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 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ger Ser His His Wal
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 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
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 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Los Leu Thr Ser Glu
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Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Cln Pro Glu Lys
                    390
                                        395
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
                405
                                    410
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
                                425
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asn Gly Leu le Pro
                            440
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
                        455
                                            460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
                    470
                                        475
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
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Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
                            520
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
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                                            540
Ala Thr Ala Gly Asn Gly Asp Gly Leu Ile Pro Pro Arg Lys Ser
                    550
                                        555
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105 Arg The Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr 565 570 His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly\Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln 600 Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys 615 620 Lys Glu Lys Asp I Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile 630 635 Ala Met Leu Arg Leu Ĝlu Leu Asp Thr Met Lys His Gln Ser Gln Leu 650 <210> 306 <211> 671 <212> PRT <213> Homo sapien <400> 306 Met Val Val Glu Val Asp Ser Met Pr δ Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp T. 40 ij, His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gl χ Lys Ser Asn Val 70 Щ Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser 105 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Sek Ala Phe 120 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His 135 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Wet 150 155 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Alà 165 170 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu 185 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr 200 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met 215 220 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn 230 235 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys

245

5ul A1

Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly 260 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val 275 280 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr 295 Gly Arg Thr Ala Let Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile 310 315 Val Ser Leu Leu Ghu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu 330 Ser Gly Gln Thr Ala Arg Alu Tyr Ala Val Ser Ser His His Val 345 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile 3/60 Ser Ser Glu Asn Ser Asn Pro Gla Gln Asp Leu Lys Leu Thr Ser Glu 375 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys\Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn 425 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asn Gly Leu Ile Pro 440 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu 455 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu 470 475 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp 485 490 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu 500 505 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile A&n Lys Asp 520 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gl χ Ala 550 555 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg 570 Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His 585 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn 600 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile 615 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys 630 Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu

120

180

240

300

360

420

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        agaatgetta ggactetaad aggtttttga gaatgtgttg gtaagggeea eteaateeaa
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        ctttcagatg ggaaacactc aggcatcaac aggctcacct ttgaaatgca tcctaagcca
                                                                               480
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                                                                               540
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                                                                               600
        ttacaatact atcctgcage ttgacct tt ctgtaagagg gaaggcaaat ggagtgaaat
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        accttatgtc caagetttet tttcattgaa ggagaataca ctatgcaaag cttgaaattt
                                                                               720
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                                                                               800
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                                        25
       Thr Leu Glu Lys Glu Val Ala His Phe Phe Cys Thr Met Ala Trp Pro
                                    40
       Gln His Ser Leu Ser Asp Gly Glu Lys Trp Pro Pro Glu Gly\Ser Thr
       Asp Tyr Asn Thr Ile Leu Gln Leu Asp Leu Phe Cys Lys Arg Glu Gly
       Lys Trp Ser Glu Ile Pro Tyr Val Gln Ala Phe Phe Ser Leu Lys
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        <223> Made in the lak
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<213> Homo sapiens

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Sul-AI

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<213> Homo sapiens

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Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe 35 40 45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
50 55 60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
65 70 75 80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
100 105 110

Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser 115 120 125

Glu Val Val Lys Leu Val Leu Asp Arg Cys Gln Leu Asn Val Leu 130 135 140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu 145 150 155

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile 165 170 175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu 180 185 190

Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu 195 200 205

Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Gly Ile His Glu 210 215 220

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الميل
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 Cys Gly Ser Ala Sek Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
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                                 265
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